September 1975

BROTHERHOOD OF RAILROAD SIGNALMEN
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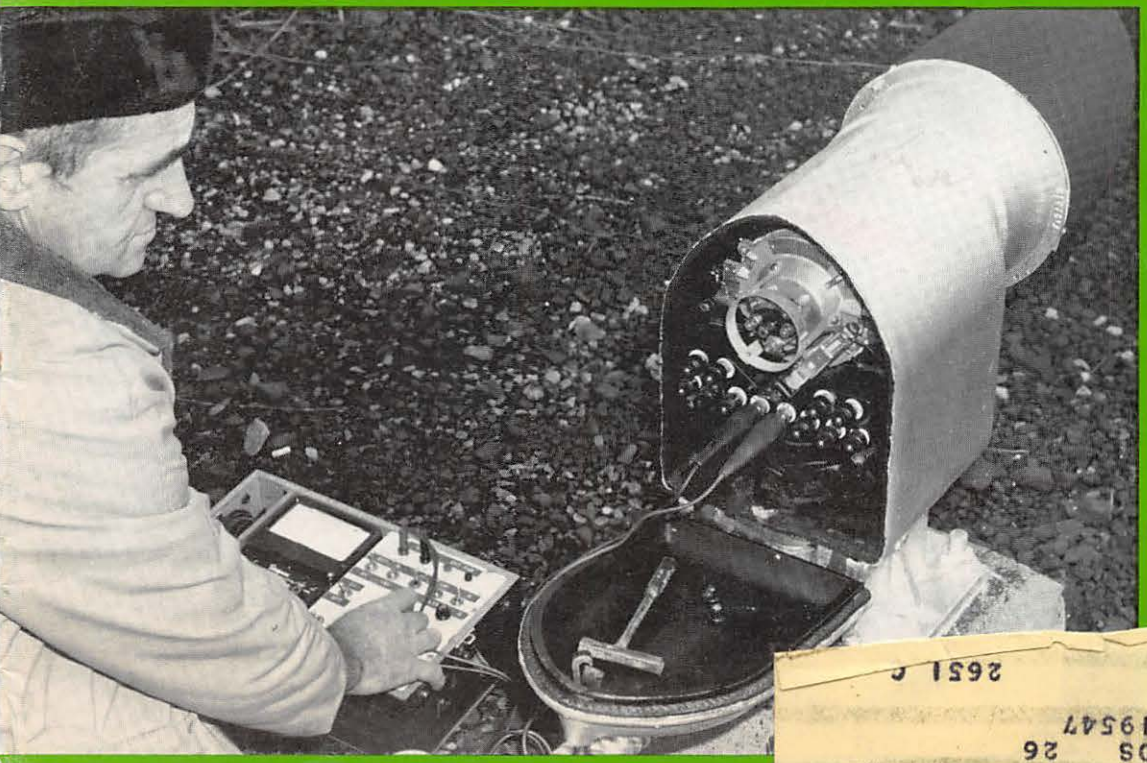
THE SIGNALMANS JOURNAL

C&O signal inspector Russell Hagley does paper and field work



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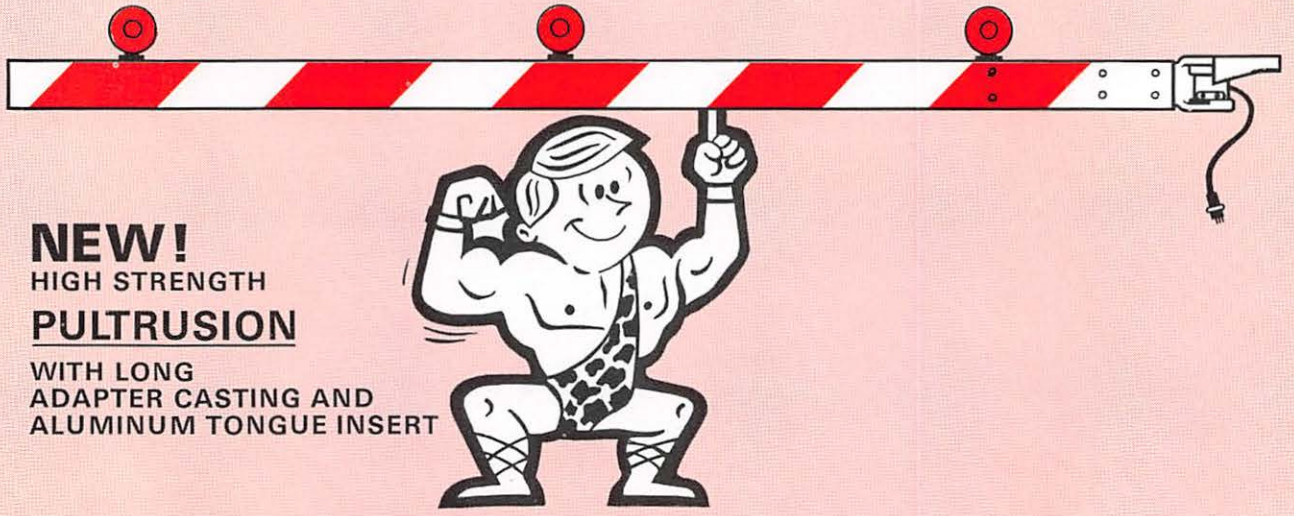

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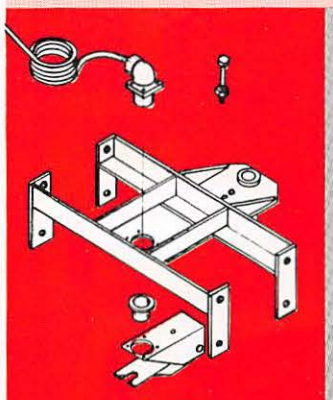

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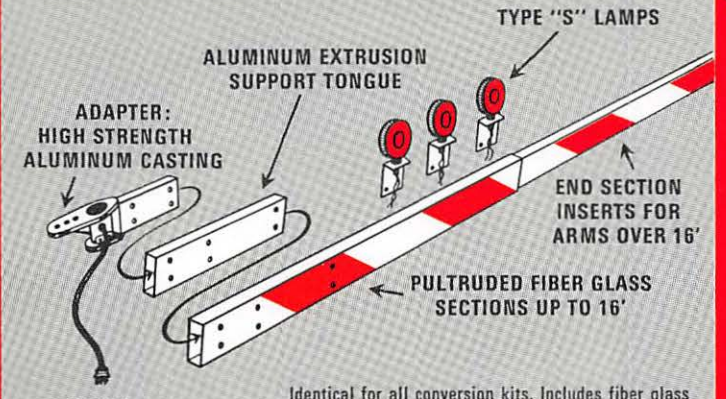
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The Signalman's JOURNAL

OFFICIAL PUBLICATION BROTHERHOOD OF RAILROAD SIGNALMEN

Robert W. McKnight, Editor and Manager

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September 1975

Vol. 56 No. 7

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GRAND LODGE DIRECTORY

C. J. CHAMBERLAIN, *President*
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Mount Prospect, IL 60056

R. T. BATES, *Sec'y-Treas.*
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502-442-8732

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Mount Prospect, IL 60056

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Montreal, Que. H3G 1P9
514-861-9959

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202-628-5935

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J. E. HANSEN
601 W. Golf Road
Mount Prospect, IL 60056

Grand Lodge Representatives

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Mount Prospect, IL 60056

R. R. MITCHELL
1833 Pembina Highway, Apt. 200
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204-269-8716

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Chamberlain's Message

Track motor car set-offs need more attention and action now

There is one particular item, namely track motor car set-offs, involving railroad safety that continues to be of major concern to us, primarily because of the daily exposure of our members to serious injury or death in their operation of track motor cars. From complaints received from our members and on our observation, we view the conditions on many railroads as having reached critical proportions. Not only are track motor car set-offs no longer being installed or repaired on many railroads, those few that have managed to survive are often torn out during track resurfacing, rail relaying, or tie renewal programs.

It is evident, contrary to what top management believes it to be, that cooperation between one department and another on many carriers leaves much to be desired. While we must admit that there is some evidence which supports the possibility that safety departments are concerned with the safety of a signal maintainer, we suggest with tongue in cheek that the priorities are in complete disorder and at the very least should be reevaluated.

For example, we challenge an overall safety logic that requires a signal maintainer to don his "hard hat," safety goggles, and wear safety shoes with his first step on the property, when the very next step may put him on a motor car in "no man's land" without any regard for his safety while on the motor car. It is not our intent to belittle safety equipment. We realize it is furnished to offer some protection to a signal maintainer in the performance of his duties and is definitely a cost item to the carriers.

Nevertheless, we are not aware of any such item that can serve to provide protection from a train striking a motor car on the track, unless it is a set-off to safely remove the motor car from the track in the first place.

The problem is so acute on some railroads, that the set-off at the motor car "shanty" is probably the only usable one existing on the entire territory. In one case, even it was found by the FRA to be in poor condition and the carrier made repairs.

It seems to be relatively unimportant to the railroads that most company rules state, in one manner or another, that "motor cars must not be left unattended on the track." We are deeply interested in being informed how a signal maintainer can perform his maintenance duties without violating this rule. We cannot visualize that anything can be accomplished. Attending to the safety of a motor car on a "hot" track, even with a set-off readily available, is a full time assignment; without any, it is a complete impossibility.

With set-offs so few and far between, the maintainer can not get his required work done within the regular 8 hour shift. With so much to do and with few set-offs, the solution that raises the least "heat" from the supervisor, is to stop the motor car at the location where work is to be done and leave it parked on the track.

There is no question that responsible carrier officers are aware that these conditions exist. Unfortunately, many assume that because the signal maintainer violated a rule which led to an incident, he alone is responsible and, therefore, the carrier is not liable as a result of his negligence. Not so—merely knowing that the condition exists or knowing that the work cannot be performed without repeated violations of the rule, in many cases, places the full liability on the carrier.

In present railroad operation, signal maintainers are the only personnel required to use motor cars. Frequently we receive complaints that would indicate that some engineering personnel are not sympathetic to the unsafe condition because they no longer operate track motor cars, but use hi-rail vehicles or trucks.

It is obivous that many carrier officers are uninformed as to the responsibilities and work of a signal maintainer. They suggest that the signal maintainer set-off his motor car at a road crossing. Signal systems and their related equipment sites are usually designed in the interest of the movement of trains and except for highway warning devices, any relationship between highway or roadway access for maintenance purposes is purely coincidental.

In addition, anyone knowledgeable in the removal of a motor car

GRS Yard Automation Controls New Burlington Northern Yard

BN's Northtown Yard, at Fridley, Minnesota, is handling as many as 2000 cars a day, with only 48 of its planned 63 class tracks in service.

A GRS radar-computer yard automation system governs all car processing and produces video or hard copy operation reports on demand. Video terminals display continuously and instantaneously updated process control data.

All-electric car retarders were selected to provide reliable operation during the low winter temperatures common to the area. Radar speed detection is solid state. Silentard ® , the GRS noise abatement system, reduces retarder operating noise to meet the local residential area ordinances

A GRS NX pushbutton interlocking control sets up preferred routes for getting trains into and out of the yard and for bypass runthroughs.

Full throughput, with all 63 tracks in service, is projected at 3000 cars, for late 1975.

GRS

GENERAL RAILWAY SIGNAL

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from the track at a road crossing realizes the problems and hazards involved. Road or highway grade crossings usually are elevated somewhat from the normal terrain, and in some cases, particularly at rural crossings, it is almost impossible for one person to get the motor car back on the track once it has been removed to a point clear of vehicular traffic. We have also been advised of occasions wherein highway patrol officers have informed signal maintainers that they were subject to parking violations along the highway right of way. On one occasion, deep ruts were cut by wheel flanges on a black top highway crossing apron during hot weather and the signal maintainer was advised that he could be subject to pay for damages in the repair of the apron.

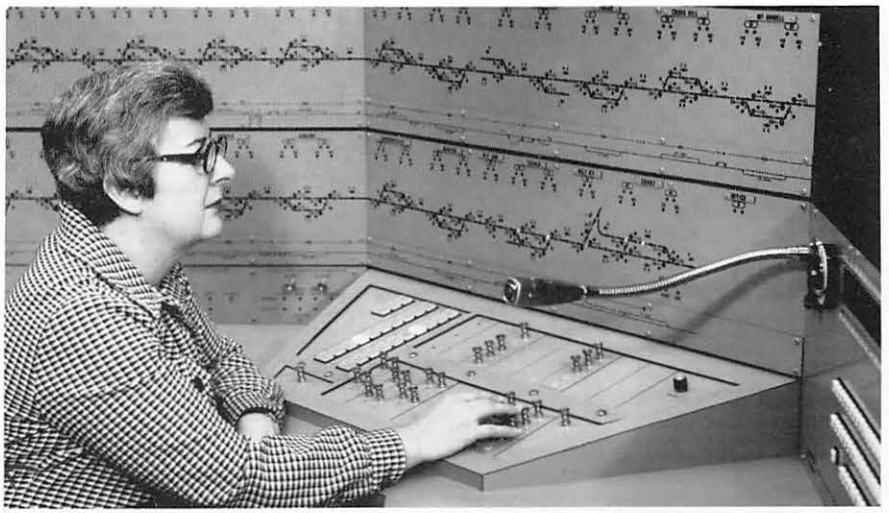
Nevertheless, it is our judgment grade crossings should not be used to set motor cars in the clear. They were not designed for that purpose, they pose the dangerous hazard of being struck by vehicular traffic, and present excessive strain to one's physical condition both in removing the motor car and the extreme difficulty encountered in getting it back onto the track.

We are convinced that something must be done to improve the unsafe conditions of the motor car operator—and very soon. We will continue to bring this unsafe condition to the attention of railroads until their "lip service" promises to correct the condition, will one day become a reality. We expect to achieve this goal, not only in the interest of the signal maintainer who operates a motor car, but for railroad safety in general.

We suggest that anyone required to operate a motor car should request the installation of all set-offs necessary to perform his assignment in a safe manner. The request should be written and a copy sent to his local chairman, general chairman and this office. We have found that a few carriers, after a review of the problem, have agreed that an unsafe condition exists and accordingly have installed or repaired set-offs. Some only required a plank or two to make an unusable set-off usable once again.

There is one safe solution to the motor car set-off problem. Simply have the dispatcher give the signal maintainer an absolute block while he is on the track and do not let trains into the territory until the maintainer calls in and reports that he is in the clear. Some railroads use this practice in ctc territory with the dispatcher "blocking" his signal levers preventing trains from entering the section of line where the maintainer is working.

We are sure of one thing—if we do not make the effort—no one else will.



Seaboard Coast Line centralized traffic control machine is tested by Union Switch & Signal Engineering Project Manager, Mary Aldrich, prior to leaving the factory. The machine is now in service at Atlanta, GA and control train movements over 322 miles of railroad.

News

Signalmen win dispute with M-K-T on camp cars

Arbitration Board No. 341 has ruled that the Missouri-Kansas-Texas may continue to use certain camp trailers to house signal gang employes with the provision that they be brought into compliance with the following health standards:

"Each trailer will be provided with the flush toilets, similar to those used in private homes. Necessary plumbing will be installed so that waste from the kitchen and bathroom will drain into a sewer line.

"Each trailer will have refrigerated air conditioning sufficient to maintain a reasonable temperature.

"Carrier will arrange to park its trailers only in such locations where electricity, water and sewer connections are readily available. When the essential services are not available, the involved employes will be entitled to full expenses."

The Board also issued an award concerning travel time of the November 16, 1971 National Agreement. The Board said:

"Employes assigned to the mobile living facilities will be paid $33 for each calendar week, including rest days and holidays to cover the cost of their meals and travel expenses, pillows, bed linens, blankets, towels, soap, cooking utensils, dishes and cutlery, on a daily basis, except that it shall not be payable for week days on which the employe is voluntarily absent from service, and it shall not be payable for rest days or holidays if the employe is voluntarily absent from service when work is available to him on the work day preceding or the work day following said rest day or holiday."

Signal equipment to be at fall show

Signal equipment with special emphasis on track circuit controls and rail highway-grade crossing warning systems will be featured at the September 15-18 annual meeting of the communication and signal section at the Fairmont Hotel in New Orleans, LA. Sponsor of the

exhibit, The Railway Systems Suppliers Inc., reports that considerable operating equipment will be on view for those attending the meetings.

Listed below are a selection of key signal suppliers whose Exhibit booth numbers are indicated:

8—**Erico Rail Products Co.**: grade crossing warning systems
16—**3M Company**: insulated rail joints
27—**LaMarche Mfg. Co.**: signal rectifiers and battery chargers
28—**Intma Inc.**: insulated rail joints
29-30—**Union Switch & Signal Div., WABCO**: grade crossing warning systems
51—**Anaconda Co., Wire and Cable Div.**: insulated signal wire and cable
57-58—**Western Cullen Div., Federal Sign & Signal Corp.**: rail-highway grade crossing warning systems
60—**Transcontrol Corp.**: signal equipment
64-65—**Harmon Electronics, Inc.**: grade crossing warning systems
78-80—**General Railway Signal Co.**: track circuit equipment
83—**The Okonite Co.**: signal wire and cable
88-89—**Edison Battery Div., McGraw-Edison Co.**: signal batteries and battery chargers
91-93—**Servo Corp. of America**: hotbox detectors and automatic car identification systems
94—**Nife, Inc.**: signal batteries
95-97—**Safetran Systems Corp.**: signal equipment and systems
100—**The Kerite Co.**: signal wire and cable

Safety meeting to discuss rail crossings

Railroad grade crossing safety will be the topic of an all-morning session at the 63rd Annual National Safety Congress and Exposition, to be held September 29 through October 2 in Chicago.

Otto F. Sonefeld, staff assistant to the vice-president of the Santa Fe and Chairman of the Council's Railroad Grade Crossing Committee, will preside over the session starting at 9:30 a.m. Tuesday, September 30, in the Windsor Room of the Pick-Congress Hotel. The session is sponsored by the National Safety Council's Traffic Conference.

Sonefeld will open the session with an overview of railroad grade crossing safety in a paper entitled, "Railroad-Highway Crossings; Not Just a Railroad Problem." Following Sonefeld, Patrick McCue, executive director of railroad-highway programs, AAR, will present a paper entitled, "Status Report on the National Grade Crossing Program—Update From Washington."

The session also will feature a driver training sound-slide presentation entitled, "Only You," and a paper by David J. Astle of the Colorado Public Utilities Commission on "Selective Crossing Closures—One Answer to Urban Crossing Problems." At 11:00 a.m., two safety experts will discuss state grade crossing safety efforts in Kansas and Texas.

AAR asks for grade crossing money

The railroad industry has called for authorization of a total of $500 million for safety improvements at rail-highway grade crossings and for construction of "necessary" grade crossing separations and relocation of railroads in heavily congested urban areas.

Of the total amount, $100 million would go for rail-highway grade crossing improvements and the remaining $400 million for separations and relocations.

Testifying before the House Public Works and Transportation Subcommittee on Surface Transportation, Patrick J. McCue, executive director of the Highway-Rail Programs Office, AAR, suggested that the apportionment of the funds "be at least partly based on the number of crossings in each state to assure equitable distribution."

McCue also recommended that the federal share of the cost of projects constructed with the proposed grade crossing warning funds and the grade crossing elimination funds "should be determined in accordance with Federal Highway Administration directives that specify the benefits and responsibilities of the public agencies and the railroads."

Like the many highway advocates presently asking for continuation of their basic program, we say that the continuing need and the demonstrable success of the highway safety program is the best argument for its preservation.

The railroad industry, he emphasized, "has not, and does not, oppose the concept of a separate Highway Trust Fund," nor does it oppose the concept of user charges "earmarked for investment in specific transportation programs as long as the charges are directly proportional to benefits derived from the programs and do not hinder the market mechanisms which would otherwise favor selection of the most efficient transportation modes."

The railroad industry does feel, however, "that there are some inequities in the user charges presently supporting the Highway Trust Fund which need to be redressed," McCue testified, adding a recommendation for development of a national transportation policy "promoting a balanced transportation system efficiently serving all interests in our economy."

Rooney introduces employment bill

U.S. Rep. Fred B. Rooney, D-Pa., Chairman of the Subcommittee on Transportation and Commerce of the House Committee on Interstate and Foreign Commerce, today introduced a bill on behalf of his subcommittee which would provide thousands of emergency public works jobs on railroads.

Entitled the "Emergency Rail Transportation Improvement and Employment Act of 1975," the bill authorizes $240 million to be used in the improvement of the reliability, safety, and energy efficiency of railroad transportation and to reduce unemployment by providing funds for work in repairing, restoring, rehabilitating, and improving essential railroad roadbeds and facilities such as tracks, ties, rails, switches, roadbeds, bridges, yards, and grade crossings.

Under this bill, Amtrak, Conrail, the Rock Island, the Boston & Maine, and seven bankrupt railroads from the northeast are eligible applicants for a grant. Within a period of 30 days after enactment of the bill, the Secretary of Transportation would establish public procedures for making and evaluating applicants for a grant. The application for a grant would include a description of the projects and a statement as to the number of persons they will employ.

The hiring of furloughed maintenance employees is the highest of employment priorities for jobs created by this bill. Unemployed persons who have exhausted unemployment insurance benefits or are not eligible for these benefits or

(Please turn to page 28)

THE SIGNALMAN'S JOURNAL

To cover his 60-mile territory, **Brother Hagley,** C&O signal inspector uses truck with special utility-type tool cabinets. At right, he checks a Servosafe hotbox detector.

Russ Hagley is C&O inspector/ chairman

Take talent and skill in electronics, add creative ability in the electrical and mechanical fields and place them in a railroad man with a warm personality. This winning combination is a Chessie System signal inspector by the name of Russell G. Hagley, who is also local chairman and charter member of Hocking Lodge 216.

After considering Brother Hagley's background, it is easy to see how he got to where he is today. His father Clarence J., now 80 and retired, was the Chesapeake & Ohio signal maintainer at Carey, Ohio, and also served as BofRS local chairman. So it is not surprising that son Russ followed in his father's footsteps.

Brother Hagley started in the C&O signal department at Carey in 1945. He advanced through several positions to signalman, spending 13 years in signal construction work. During this period he found time to complete a correspondence course in electronics which provided him with theory and advanced technical knowledge to go with his practical experience. This plus his high school education has given Hagley a good solid foundation upon which to build. An avid reader and student of "Radio-Electronics" magazine has been a continuing educational process for him.

For the last 17 years, Brother Hagley has been a signal inspector with headquarters at Walbridge yard, just south of Toledo. His territory covers some 60 miles of double-track mainline from Upper Sandusky, Ohio to Walbridge and north to C&O docks at Presque Isle on Lake Erie.

The mainline is signaled with double-track centralized traffic control with movements governed by multi-aspect colorlight signals. Hagley inspects and tests hotbox detectors, ctc carrier equipment, audio frequency overlay circuit units and presence detectors. Also, he repairs much of this electronic equipment as well as handling his regular duties of testing relays, meggering cable and making other tests to assure that all equipment and signal facilities are working properly. Additionally, Hagley has the responsibility of making inspections and tests on the retarders, controls and signal equipment at Walbridge yard.

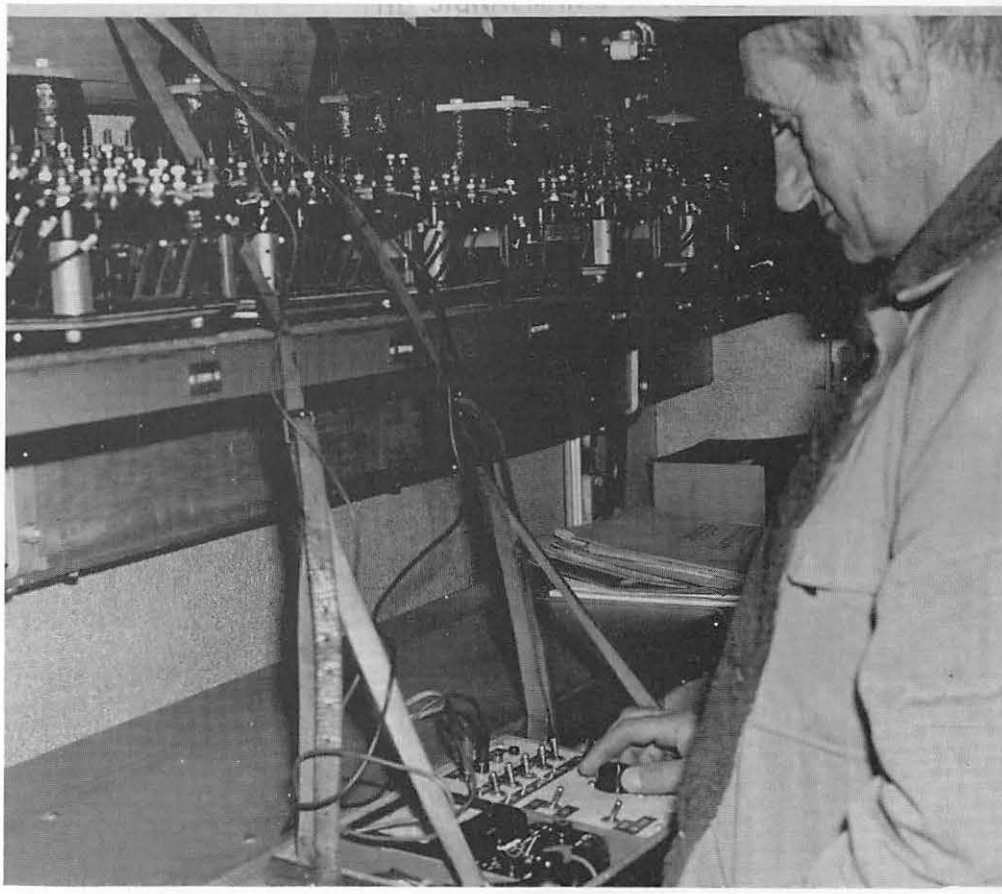
His creative ability comes to the forefront in adapting and making test equipment to help him in his work. For example, he built a very useful test set based on the Simpson Electric Co. model 260 meter. With toggle switches, jacks and the meter, Brother Hagley can make current and voltage checks on relays, signals and other signal equipment. The meter and associated test switches are in a wood box that holds its own power supply (eight 1.5 volt cells). Also, the test set will operate off an external 1.5 volt to 24 volt dc power source.

Hagley also has a Sencore transistor checker and a Dumont model 4018 oscilloscope to use in his work. For the "scope", he built a component curve tracer which enables him to check diodes, resistors, capacitors, transistors, SCRs and other semi-conductors. The component curve tracer will display a characteristic trace on the oscilloscope. He built the component curve tracer from instructions provided in an article in "Radio-Electronics" magazine.

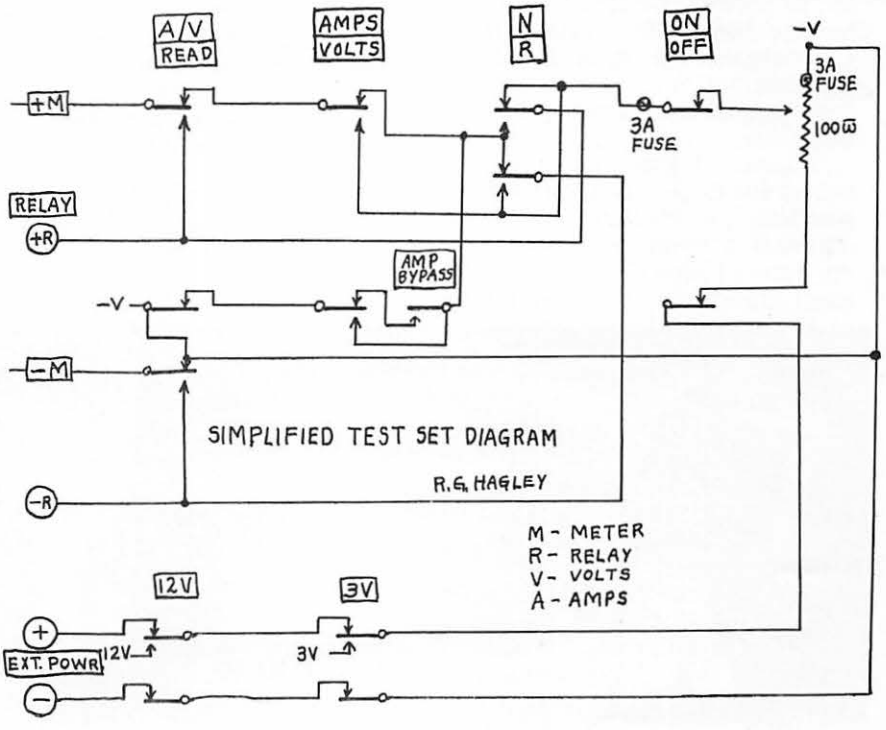
He built a power-off alarm that he installed at MI interlocking to alert the operator. Using a Sonalert electronic audible signal unit, Hagley designed the circuitry so that when the power goes off, the alarm sounds. The operator can move a toggle switch to shut off the alarm and so acknowledge the power failure. When commercial ac returns, the alarm again sounds alerting the operator, and he moves the toggle to the original position to acknowledge and reset the system for normal operation.

Brother Hagley's ability and liking to build things stems, no doubt, from his many years in signal construction work. Even now, he will occasionally make wiring changes or do case wiring on signal AFE projects.

And his skill and ability has carried over into his home life. With his wife Marilyn, he built an attractive, livable, 3-bedroom ranch-style home in Pemberville, Ohio. He and his wife did all the work from the foundation up—wiring, plumbing, heating, carpentry, installing appliances, etc.



Using his "Hagley-designed" test set, **Brother Hagley** checks relays in instrument bungalow. Circuit diagram is below.



PA&N Cont'd

able free from *Consumer Information, Dept. 39, Pueblo, CO 81009.*

First of all, you should know that many kinds of cancer can be easily diagnosed in a regular checkup. So don't neglect that yearly physical. With early discovery and early treatment, the chances for survival are very good.

You should also be aware of possible signs of cancer: (1) Unusual bleeding or discharge. (2) A lump or thickening in the breast or elsewhere. (3) A sore that does not heal. (4) Change in bowel or bladder habits. (5) Hoarseness or cough. (6) Indigestion or difficulty in swallowing. (7) Change in a mole or wart.

If your symptoms last longer than two weeks, go to your doctor and find out if it means cancer. Don't wait for the symptoms to become painful. Pain is not an early cancer sign.

Food book helpful for children

If you're having trouble teaching your children the importance of eating a balanced diet, maybe you could use some help from a horse, a lamb, a cow and a goose. Fred the Horse Who Likes Bread, Mary Mutton, Molly Moo and Gussie Goose are the animals in "Good Food News for Kids," a publication from the Department of Agriculture, that can teach your children about nutrition. The animals are featured in four booklets which use games and stories to introduce kids to the four basic food groups. The booklets are available free from *Consumer Information, Dept. 41, Pueblo, Co 81009.*

Children will also learn about the role of the farmer in supplying food for the dinner table. For instance, kids may be surprised to learn that the average American eats about 500 pounds of fruit and vegetables each year. That means that a farmer must grow 2,000 pounds of fruits and vegetables every year for each average family of four.

Amtrak 2-year passes are for retired railroaders

Extension of rail travel cards has been made by the National Railroad Passeger Corporation. According to K. A. Housman, vice president of personnel and administration, the following is now in effect:

Beginning with the current calendar year, we extended Rail Travel Privilege Cards expiration dates to two years for retirees and widows as their current passes expire. We also initiated a "reminder to renew" program last summer as a special service for retirees and widows. Approximately two months prior to expiration of RTPCs, they receive letters reminding them that their passes are due to expire and to file application for renewal through their home railroad as soon as possible. A renewal application form is enclosed along with information relative to current train restrictions and advance reservation limitations.

We believe extension of passes to two years will help solve some of the reissuance problems of retirees. Another consideration from our standpoint is the high turnover of the retiree list. By having a two year expiration date on the card, we are able to purge our "Lost Pass List" every so often. The list would otherwise become so voluminous it would no longer be an effective method of maintaining the security of the pass program.

Choking victims can get first aid

A report on "Personal business" by Business Week magazine describes how first aid methods can be used to help persons who are choking on food:

"The easiest way to help someone who is choking on food is to use an anti-choking device, now being found in more restaurants and company dining rooms. This is a tweezer-like plastic forceps that can easily remove an obstruction lodged in someone's throat."

Another method described in the Business Week article is the Heimlich maneuver, named for its developer Dr. Henry Heimlich, director of surgery at the Jewish Hospital in Cincinnati, OH. The method is described as follows:

"There are two ways to administer the technique, which has already saved many lives. First, standing behind the victim, wrap your arms around his waist, allowing his head, arms, and upper torso to hang forward. Grasp your wrist with your left hand and place against the victim's abdomen, slightly above the navel and below the rib cage. Then press your fist forcefully into the victims abdomen with a quick upward thrust. Repeat if necessary. The food should become dislodged quickly.

If the victim is lying down, kneel over him, knees astride hips. Place one hand atop the other and put the heel of the bottom hand on the abdomen slightly above the navel and below the rib cage. Press forcefully into the victim's abdomen with a quick upward thrust. Repeat several times if necessary."

NCSC is supported by AFL-CIO unions

There may be several groups and organizations attempting to win support of retired people, but the National Council of Senior Citizens is a federation of older peoples' clubs and individual members which receive the active support of the AFL-CIO. NCSC has been supported by the Executive Council and endorsed by successive conventions of AFL-CIO since the senior citizens group was launched in 1961 by the late Congressman Aime J. Forand to spearhead the fight for the enactment of Medicare. NCSC has worked consistently alongside organized labor to improve the quality of life for all Americans.

Because some other senior citizens' groups have exploited the elderly, the AFL-CIO has felt it necessary to alert all those senior citizens and elderly people that the National Council of Senior Citizens is one organization that has worked closely with and has earned the support and recognition of AFL-CIO and its affiliated international labor unions.

How to cope with adolesence in the home

To help you ease your teenager's growing pains, the Department of Health, Education and Welfare has written a booklet entitled "An Adolescent in Your Home." The booklet is available for 50¢ from Consumer Information, Dept. 36, Pueblo, CO 81009.

The booklet suggests that the best way to help your teenager is to provide him with all the facts about growing up. Lend a sympathetic ear to his problems and discuss information you give him.

His creative ability comes to the forefront in adapting and making test equipment to help him in his work. For example, he built a very useful test set based on the Simpson Electric Co. model 260 meter. With toggle switches, jacks and the meter, Brother Hagley can make current and voltage checks on relays, signals and other signal equipment. The meter and associated test switches are in a wood box that holds its own power supply (eight 1.5 volt cells). Also, the test set will operate off an external 1.5 volt to 24 volt dc power source.

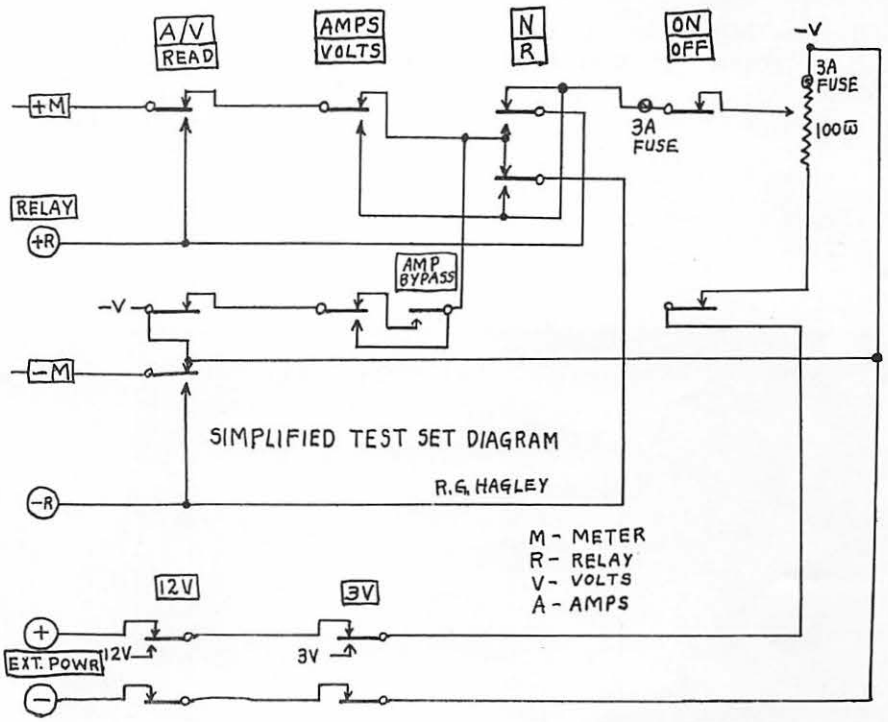
Hagley also has a Sencore transistor checker and a Dumont model 4018 oscilloscope to use in his work. For the "scope", he built a component curve tracer which enables him to check diodes, resistors, capacitors, transistors, SCRs and other semi-conductors. The component curve tracer will display a characteristic trace on the oscilloscope. He built the component curve tracer from instructions provided in an article in "Radio-Electronics" magazine.

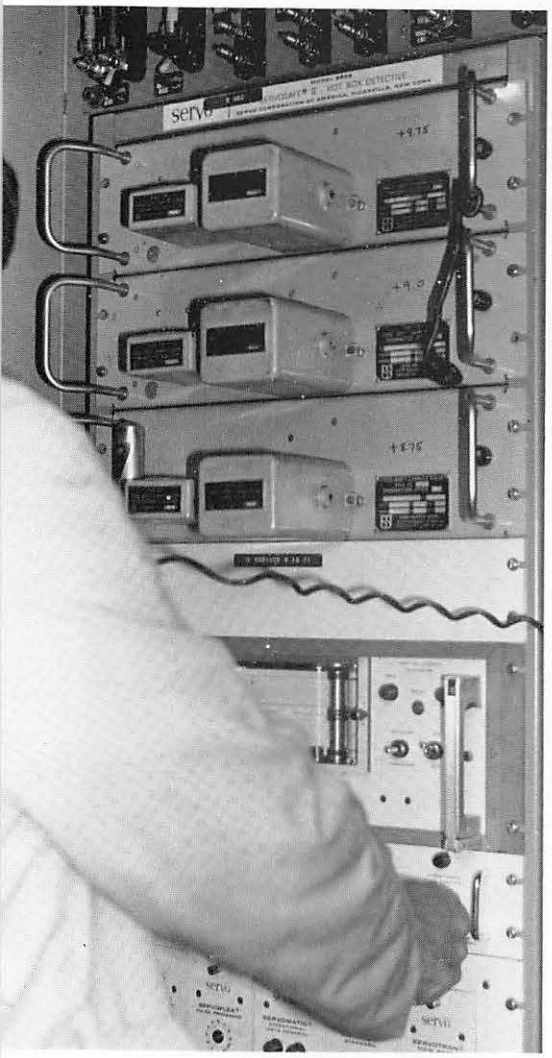
He built a power-off alarm that he installed at MI interlocking to alert the operator. Using a Sonalert electronic audible signal unit, Hagley designed the circuitry so that when the power goes off, the alarm sounds. The operator can move a toggle switch to shut off the alarm and so acknowledge the power failure. When commercial ac returns, the alarm again sounds alerting the operator, and he moves the toggle to the original position to acknowledge and reset the system for normal operation.

Brother Hagley's ability and liking to build things stems, no doubt, from his many years in signal construction work. Even now, he will occasionally make wiring changes or do case wiring on signal AFE projects.

And his skill and ability has carried over into his home life. With his wife Marilyn, he built an attractive, livable, 3-bedroom ranch-style home in Pemberville, Ohio. He and his wife did all the work from the foundation up—wiring, plumbing, heating, carpentry, installing appliances, etc.

Using his "Hagley-designed" test set, **Brother Hagley** checks relays in instrument bungalow. Circuit diagram is below.





Checking hotbox detector electronics is another of **Russ Hagley's** duties.

In foreground is oscilloscope and at end of desk is the component curve tracer **Hagley** built for use with the scope in checking semiconductors, transistors and other components.

Speaking of a family, Russ and Marilyn will have been married 23 years this November. They have four daughters: Mrs. Linda Chandler; Peggy, employed by radio station WMGS in Bowling Green, Ohio; Kathy, a high school senior; and Judy, a sophomore in high school.

An outdoors' man, Russ also built a very compact trailer that houses all the necessities for camping including a tent that opens along one side of the trailer to provide a vacation home away from home.

Hobbies? Yes. Hagley says they include bowling and "bogey golf" (playing one over par per hole); and when spare time allows, the repairing of radio and TV sets.

Enough to do? Plenty, but Brother Hagley is active in BofRS matters. He has been local chairman of Hocking Lodge 216 for 12 years. He works closely with Lawrence Mates, recording and financial secretary, in keeping track of the 37 members of local 216.

Also, as an aid to Hagley as well as the members, he has developed a pay-scale sheet that he posts at each of the four headquarters of men in the local. This sheet indicates the rates of pay for straight time (1 to 40 hours) and overtime up to 80 hours per week for various positions held by the men in local 216, including top assistant signalmen, signal maintainer, district signal maintainer, lead maintainer and signal inspector. Also, Hagley's address and phone number are listed so the men can readily contact him.

Also, Brother Hagley has been chairman of the board of trustees of the C&O general committee for several years.

From the one day visit by The Signalman's Journal, it was quickly evident that Brother Hagley is a skilled craftsman with a warm, friendly personality who can be depended upon to help his fellow Brothers. Such men are the heart and backbone of the BofRS and the craft known as railroad signaling.

Discussing BofRS and employe matters with **Brother Hagley** (right) with (left to right) **Harvey H. Parker,** C&O general chairman; **Ross Updegraff,** chief signalman, Local 216; **Terry Donnal,** member 216; and **Lawrence Mates,** recording and financial secretary, Hocking Local 216.

Detector fails, T&P train crashes

On Sept. 16, 1973, a westbound Texas & Pacific freight train, moving about 35 mph, struck the counterweight of an open drawbridge at Canal, LA, resulting in fatal injuries to the engineer and front brakeman. The weather was cloudy with intermittent ground fog.

The accident was caused by defective rail-seating detectors that permitted false proceed aspects to be displayed when the signal lever was set for rail movement with the bridge raised.

The two locomotive units and first 15 cars derailed and plunged into the waterway. The 16th car was derailed but remained on the track structure. Both locomotives and 11 cars were destroyed, the bridge and five cars sustained substantial damage. The carrier estimated the cost of damage to equipment, bridge, signal and interlocking equipment at $626,000.

At the time of the accident the safe operation of trains over the bridge at Canal was totally dependent upon the rail seating detector relay that was controlled by the four plunger rods.

BRIDGE RAISED

From all indications the bridge operator raised the movable span about 11:30 p.m. for the passage of a boat. The bridge rail seating detector relay apparently remained falsely energized due to failure of the plungers to raise properly and de-energize the circuit. The relay thus indicated that the bridge was down and seated for rail movement. The bridge operator did not check the rail seat indicator lights on his control panel. When interviewed he stated the lights are normally switched off and are turned on only when the operator has trouble seating the bridge.

After the boat passed the bridge operator claimed he operated the controls to lower the bridge, lost electrical power in the master controller and the bridge stopped. Examination of the various bridge control systems did not reveal any condition that would have caused the bridge to stop if the controls were operated in the proper sequence.

The post accident examination and tests indicate that for the derail and locks to assume their normal position, as they were found after the accident, and for the signal to clear, the bridge operator had to position the three levers on the control console to normal position. When the first of the three levers was positioned normal the motor controller and span brake circuit became de-energized. When this occurred it was not possible to apply power to the master controller motor and the span brakes applied automatically. The operator stated he moved the master controller handle back and forth in an attempt to move the bridge. This apparently was done after the lock, derail and signal levers had been lined normal and it was not possible to lower the bridge.

SIGNAL CLEARED

With the rail seat dectector plungers stuck in the lowered position and the associated relay remaining energized, although the bridge was raised, the derail and locks returned normal for rail traffic and the signal cleared when their respective levers were returned to normal position on the control console.

The burn marks on the master controller drum contacts were caused by the bridge operator trying to start the gasoline powered electrical power supply motor with the power control relay de-energized and the span brakes applied.

The console machine in the bridge operator cabin at Canal is provided with two position levers (normal and reverse) to operate the derail, locks and signals.

With the derail lever in normal position the derails are set for rail traffic; when it is in reverse position the derails are in derail position. With the lock lever in normal position the bridge and rail locks are locked for rail traffic; when it is in reverse position the bridge and rail locks are released to permit raising and lowering the span. With the signal lever in normal position signals 92.9 and 94.9 will display clear aspects. With the signal lever in reverse position signals 92.9 and 94.9 will display approach and stop aspects, respectively.

Shortly after the accident the derail, lock and signal levers were found in reverse position, lined for water traffic, and out of correspondence with the derail and locks which were lined for rail traffic. Signal 94.9 was displaying a stop aspect due to the presence of equipment immediately west of that signal.

Thorough testing of the signal appliances revealed that for the derails, locks and signal to assume the normal position, with the bridge raised, the relay that detects the position of the rails must be energized. This relay is normally energized when the bridge is up. Also, the derail, lock and signal control levers must be positioned normal or lined for rail traffic.

The bridge position indicator relay is controlled by four rail seat detector plungers (one beneath each end of each rail of the movable span). The spring loaded metal rod plungers pass v e r t i c a l l y through holes in the frog type connecting castings on the rails of the fixed spans.

When the bridge is properly seated the spring loaded plungers are compressed, the bridge position indicator relay is energized and the levers may be lined normal for rail traffic. With the bridge raised the plungers are designed to be extended upward thus de-energizing the bridge position indicator relay and the derail, locks and signal cannot be returned to normal position for rail traffic. Rail seating indicator lights are located on the span control desk. However, these lights may be turned on and off with a switch.

DETECTORS DEFECTIVE

Carrier officials indicated that an inspection of the signal and interlocking appliances on February 27, 1973, revealed all four rail seat detectors to be defective. Shortly thereafter new plungers, made from steel rods, were installed. At the time of installation the tops of the plungers were tapered. After the accident the plunger tops were mushroomed over.

As a result of the derailment the northwest plunger was damaged and inoperable. Extensive testing of the three undamaged plungers disclosed that they failed to raise far enough to de-energize the bridge seat indicator relay. Therefore, when the movable span was raised the indicator relay remained energized and indicated to the interlocking and signal appliances that the bridge was still seated.

The rail seat detector plungers were designed to raise about two inches when the bridge was up. Federal regulations require that this type indicator relay become de-energized when the plungers have extended upward ⅜ of an inch. Extensive testing of the three undamaged plungers revealed they would raise from zero to ½ inch and all three failed to de-energize the indication relay. Examination of the plungers revealed they failed to raise fully because of their mushroomed tops binding on the sides of the connecting casting. The sides of the hole, through which the plunger passed, had wear indentations indicating the plungers had been binding. The coil springs that force the plungers upward were not replaced when the new plungers were installed and it is evident they did not have sufficient strength to assure raising of the plungers when the bridge was raised. Also, each plunger and frog had an accumulation of sand, grease and dirt that further restricted the movement of the plungers.

Alabama now has state track inspectors

Alabama is now the 10th state to be certified for participation in track inspection and surveillance under the Federal Railroad Safety Act of 1970.

Other states that have been certified include: Illinois, Iowa, Missouri, Nebraska, Ohio, Oregon, Pennsylvania, Vermont and Washington.

Certification under the program makes the Alabama Public Service Commission, which is handling state inspection, eligible for federal matching funds of up to 50% of the cost of personnel, equipment, and other activities required to carry out a track safety program. The Federal Railroad Administration will provide training for the federal inspectors at its school in Oklahoma City.

Personal Aids & News

From Sec.-Treas. R. T. Bates: RUIA benefits raised

In September, the U.S. Railroad Retirement Board began paying increased unemployment and sickness benefits under recent legislation enacted by Congress. The legislation, Public Law 94-92, amends the Railroad Unemployment Insurance Act, effective July 1, 1975. Some of the other important provisions of this legislation include a reduction in the waiting period for sickness benefits, liberalization of the eligibility requirements for new employes and provision, for the first time, of extended unemployment benefits for employes with less than 10 years of railroad service.

There is also a change in the way unemployment benefits are paid in the event of a strike.

The following questions and answers are intended to give more information on these changes as well as cover some of the other related provisions of this national program administered by the U.S. Railroad Retirement Board.

(1) How much did these unemployment and sickness benefits increase?

Under the amended Act, the maximum daily benefit rate increases from $12.70 to $24 in the current benefit year which began July 1, 1975, and to $25 in July 1976. An employe's daily benefit rate is still 60 percent of his daily rate of pay up to the daily maximum of $24 ($25 effective July 1976). The maximum amount of benefits for two weeks goes up to $240 ($250 in July 1976) compared to $127 under the old law. A new minimum of $12.70 a day was also established.

(2) What are the service and earnings qualifications?

To qualify for benefits in the benefit year which began July 1, 1975, an employe must have had railroad earnings of at least $1,000 in calendar year 1974, not counting more than $400 for any one month. If he was a new employe in 1974, he must also have worked for a railroad in at least five months of that year (not necessarily full-time in each month). Under previous law a new employe needed seven months of service to qualify.

(3) Was there a change in how long normal unemployment or sickness benefits are paid?

No. The only change was an increase in the maximum amount of normal **unemployment and sickness** benefits that can be paid. Normal benefits are paid for no more than 130 days (26 weeks) in a benefit year. An employe could receive these payments in 13 registration periods of 14 days. Benefit rights are also exhausted when a benefit year ends (normally June 30) or when benefit payments equal creditable earnings in the base year. Under the new law, the creditable earnings are increased to $775 per month from $400 for purposes of setting the maximum amount of normal benefits that can be paid.

(4) What happens if I exhaust normal benefits and am still unemployed or sick?

If an employe with 15 or more years of service exhausts his normal benefits, he may be paid additional **unemployment or sickness** benefits for as many as 130 days (26 weeks) in an extended benefit period which lasts for 13 registration periods of 14 days each. With

10 to 14 years of service the extended benefit period would last for seven registration periods in which benefits could be paid for a maximum of 65 days (13 weeks). Under the new law, an extended unemployment benefit period of seven registration periods may be set up for employes with less than 10 years of service. Benefits may be paid up to 65 days but with two limitations that do not apply to employes with 10 or more years of service.

(a) There has to be a "high" rate of unemployment in either the national economy or the railroad industry before such extended benefits can be triggered. Currently a high rate of unemployment is defined to be 4 percent or higher. At the present time the national level of unemployment is such that the "on" trigger is in effect and extended benefits to employes with less than 10 years of service are immediately payable.

(b) The total amount of unemployment benefits payable to an employe with less than 10 years of service in an extended benefit period cannot exceed half of his base year earnings under a $775 monthly limit.

To be eligible for the extended unemployment benefits, an employe must not have voluntarily retired or have left voluntarily without good cause. To be eligible for extended sickness benefits he must have at least 10 years of railroad service, be under age 65 (normal retirement age) and must not have voluntarily retired.

(5) I am a long-time railroad employe and earned less than $1,000 in 1974. Under what conditions would I still be qualified for benefits if I become unemployed or sick during the 1975-76 benefit year?

If you have 10 or more years of service but are not qualified only because of insufficient 1974 earnings, but would be qualified based on your 1975 earnings, you may start your next year early—at the beginning of any month in which you begin a period of unemployment or sickness which continues for at least 14 consecutive days. In other words, if you earned less than $1,000 in 1974, for whatever reasons, but you did earn $1,000 or more in 1975, you could begin to receive benefits starting in the 1975-76 benefit year. These benefits are referred to as early or accelerated and are available to employes who are either unemployed or sick. However, accelerated sickness benefits are terminated when he employe reaches age 65.

(6) How are sickness benefits computed under the new law?

The method of computing benefits for the first sickness claim for each period of continuing sickness was changed so that in an initial 14-day registration period, sickness benefits are payable for all days of sickness after the **fourth consecutive** day of sickness. Previously, only days **over seven** were payable for the first claim in a benefit year. For subsequent 14-day claim periods in the same period of continuing sickness, payments are made for all days of sickness over four whether or not consecutive. In the case of a new illness, however, the requirement for four consecutive days of illness would apply.

(7) What do you mean by a "period of continuing sickness"?

Once an employe has been sick for more than four consecutive days whether due to one or more illnesses, he establishes a period of continuing sickness. Such period ends after the elapse of 90 consecutive days in which time he made no claim for sickness benefits **for the same illness** or on a day when he claims sickness benefits because of a **new illness.** However, the continuing period of sickness is not automatically ended because of a new illness if there was no interruption of one or more days between his previous illness and his new illness.

For example, if an employe had back problems for three days and the flu for the next two days, he would be eligible to receive sickness benefits in his first registration period after his fourth straight day of illness. If either his back problem or the flu reoccurs within 90 days, this could be considered a continuing sickness. He would then receive in such subsequent registration periods sickness benefits for each day he was sick in excess of four whether or not the four days were consecutive. However, if after returning to work he became ill for a different reason, he would have to again meet the four-consecutive day requirement to start a new period of continuing sickness.

(8) If benefits are paid on the basis of individual days, what constitutes a day of unemployment or a day of sickness under the law?

If you are a qualified employe (see question "2"), unemployment benefits are paid for days on which you are able to work and available for work, and for which you receive no wages, salary, pay for time lost, vacation pay, holiday pay, or other remuneration (except "subsidiary remuneration"—see question "10"). There are also special rules in the case of unemployment due to a strike (see question "9").

Sickness benefits are paid for days on which you are unable to work because of sickness or injury. (For a female employe, this includes days on which she is unable to work because of pregnancy, miscarriage or childbirth.) Although you are not eligible for sickness benefits if you receive wages, vacation pay, sick pay or other pay for time lost, payments under your own health or accident insurance policy or from an employer relief department or a group insurance policy will not prevent the payment of sickness benefits.

(9) Are unemployment benefits still payable for legal strikes?

Yes, but there is a new waiting period of seven days of unemployment after the start of a legal authorized strike. If such strike lasts eight or more days, the employe's

(Please turn to page 14)

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initial registration period for practical purposes is 14 days or the duration of the strike, whichever is less. During that registration period he receives benefits for each day in excess of seven in which he was unemployed due to the strike. If the strike continues beyond 14 days, he is paid unemployment benefits for each day in excess of four in subsequent 14-day registration periods, the same as under previous law. No benefits are payable because of unemployment due to the strike if it lasts less than eight days. This applies to all employes affected by such a strike whether or not they are on strike.

As under previous law, unemployment benefits are not payable to employes participating in an illegal strike. However, employes not among those participating in such a strike who are unemployed on that account can qualify the same as if they were unemployed for any other reason.

(10) In addition to my railroad job I have a telephone answering service in my home and earn about $5 each evening. Would this prevent me from receiving unemployment or sickness benefits?

No. The new amendments increased the amount of "subsidiary remuneration" which you can receive without affecting your eligibility for sickness or unemployment benefits.

In the past you could not receive unemployment or sickness benefits for any days for which you averaged over $3 a day in subsidiary remuneration. This limit has been raised to $10 a day. However, the outside work you do must be substantially less than full-time and must not be inconsistent with holding of normal full-time employment or physical condition on which your sickness benefits are based.

(11) How are sickness and unemployment benefits financed?

Railroad employers pay the entire cost of the unemployment and sickness benefit program. The recent amendments almost doubled the tax rate on railroad employers to finance the higher levels of unemployment and sickness benefits now payable to railroad employes. Railroad employes are not taxed for unemployment and sickness benefits payable under the Railroad Unemployment Insurance Act.

(12) Are these benefit increases retroactive?

Yes. Although the new benefit rates are retroactive with respect to claim periods beginning on or after July 1, 1975, retroactive payments at the increased rates will not be paid until the middle or latter part of September. Furthermore, there will have to be a recovery from the retroactive increase if you received supplemental sickness or unemployment benefits from a private railroad plan during that period.

(13) I received supplemental benefits from a railroad plan while I was drawing sickness benefits from the Board. Am I entitled to a retroactive increase?

Yes, but employes who received supplemental benefits July 1 or later from a private insurance plan in addition to unemployment or sickness benefits from the Board will not receive the full amount of any retroactive increase that would otherwise be due them. The reason is that supplemental insurance plans take into account the amount of unemployment or sickness benefits paid by the Board. Since the new $24 rate is retroactive to July 1, the employe is only entitled to any additional benefits he would have received if that rate had been currently in effect. The remaining amount of his retroactive increase will be paid by the Board to the insurance company or to the employer, if self insured, if claim is made by them within 30 days. This means, of course, that the retroactive payments of all beneficiaries who received unemployment or sickness benefits between July 1 and the middle of September will be held up until these claims can be processed by the Board.

Supplemental income plan is available

There is a Supplemental Security Income payment plan from the Federal government that makes monthly cash payments to people who are in financial need who are 65 or older or who are blind or disabled, including blind or disabled children. This Supplemental Security Income is provided by the Social Security Administration but it does have state participation so that the programs vary from state to state. Basically the aim of the program is to guarantee a min-

THE RAIL FREIGHT AUTOMATION EQUIPMENT MARKET

By 1985 the railroads which provide premium and regular train service will have spent $830 million for rail freight automation equipment and another $150 million for COFC-only chassis cars. Annual sales — $8 million in 1975 — will accelerate toward the end of the decade and hit $97 million in 1981 and top $250 million by 1985.

Frost & Sullivan has completed a 218-page report analyzing and forecasting the market to 1985 for: onboard monitoring and obstacle detection equipment to be used on premium trains; automatic retarder systems, radio-controlled engines and automatic couplers for regular train service; dynamic inspection systems, hot box detectors and ACI scanners for fixed facilities; and special COFC-only chassis. Markets for other items, including premium grade trucks, integral COFC trains, field container transfer facilities and truck-rail ACI-based communications, are also considered. Carload projections to 1985, by commodity handled (including those for premium trains), are used as a base for the forecasts. Growth catalysts are discussed, by commodity. Railroad safety requirements are reviewed; the rate at which new trains will be purchased and freight yards will be upgraded with modern technology is determined; and an outlook for rail containerization is furnished.

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imum income to people in need who are 65 or older and people under 65 who are blind or severely disabled. Basic payments can be as much as $146.00 per month to an individual or $219.00 to an eligible couple.

Details about the Supplemental Security Income plan may be obtained in any Social Security Administration office.

Labor courses set for Chicago area union men

Three courses dealing with labor relations in the railroad industry will be conducted this fall at the Chicago Circle Campus of the University of Illinois. They will cover an introduction to the Railway Labor Act; administrative procedures for railway labor officers; and handling minor grievances under the Railway Labor Act.

Cost will be $22.00 for registrant and courses will be held on evenings Mondays and Tuesdays beginning in October. Most courses will last either five or six sessions.

Melvin B. Frye, vice president, Brotherhood of Railroad Signalmen, is the instructor for the course covering the handling of minor grievances under the Railway Labor Act. Course content will include the responsibility of local chairmen, principles applied in agreement interpretation, review of grievance clauses, review of applicable employe benefits, and instructions on preparing the initial claim including the claims letter and various appeals procedure and conferences on the property. This class on handling grievances will be held October 7, 14, 21, 28 and November 4 and 11 from 7:00 to 9:30 p.m.

William J. Donlon, general counsel, Brotherhood of Railway, Airline & Steamship Clerks, will conduct a course on introduction to the Railway Labor Act which includes historical development of railroad unionism, the basic provisions of the Railway Labor Act, procedures and practices on handling disputes, the role of the National Mediation Board and the various Adjustment Boards and procedures. Also included will be covered the duty of fair representation, application to the civil rights area. This course known as Class I will be held Tuesday evenings October 14, 21, 28 and November 4 and 11 from 7:00 to 10:00 p.m.

Class II covering the administration procedures for railway labor officers and their legal responsibilities is also being conducted by General Counsel Donlon. This course will be held on Monday evenings, October 6, 13, 20 and November 3, 10, 17. The course content covers planning and conducting meetings, basic parliamentary procedures, the Landrum-Griffin Act covering responsibilities of officers, the rights of members, election procedures, union discipline, dues, financial responsibilities of officers, civil rights laws, and the duty of fair representation in negotiating process, grievance procedures, application of Union Shop provisions.

Information may be obtained from BofRS headquarters or by writing to **Stanley Rosen,** associate professor of Labor and Industrial Relations, Chicago Labor Education Program, University of Illinois, Chicago Circle, P.O. Box 4348, Chicago, IL 60680.

Pearl train pictures now available

Four-color reproductions of Rock Island's famed "pearl train" pictures which were created in the late 1800's are now available from the railroad. A black and white reproduction of the four-color picture is shown above. The original was traced on glass and thin pieces of mother-of-pearl were placed in various locations which created a sparkling effect. These four-color reproductions are 44" long and 8" high and are printed on high quality, heavy pebble-grain paper 48" x 13" in size.

Persons wishing to obtain copies should make out a check for $5.50 to Rock Island Lines and mail it to Public Relations Department, Rock Island Lines, 139 W. Van Buren St., Chicago, IL 60605. The print will arrive in a mailing tube and it is suitable for framing.

The original picture now hangs in the Rock Island's Board Room and shows a passenger train posed in front of the Rocky Mountains.

Bicentennial events list is available

Bicentennial Events 1975 lists festivals, demonstrations and celebrations scheduled from now until December 31 and is available free from *Consumer Information, Dept. 40, Pueblo, CO 81009.*

After visiting Minute Man Park, travel west to Tuzigoot and Montezuma's Castle in Camp Verde, Arizona. This eerie grouping of prehistoric ruins, burial grounds, and Pueblo cliff dwellings recalls how Indians lived almost before time began.

In the Midwest, visit Pictured Rocks, a national landmark in Munishing, Michigan. This incredible scenic area on the shores of Lake Superior is surrounded by multi-colored sandstone cliffs and harbors, broad beaches, waterfalls, quiet inland lakes, tall forests and plentiful wildlife—a nature-lover's paradise. Daily in summer, a "settler" will demonstrate the building of an authentic log cabin of the Voyageur period in America's history.

Going south to Miami, Florida, be sure to see Fort Jefferson. Built in 1846 for control of the Florida Straits, it is the largest all-masonry fortification in the Western World. Evenings, May 15 to December 31, the park presents a special program on the historic role of Dry Tortugus, a pirate's haven in the 18th century.

Helpful hints on cancer available

Cancer: What to Know and What to Do About It. The booklet is avail-

(Please turn to page 16)

PA&N Cont'd

able free from *Consumer Information, Dept. 39, Pueblo, CO 81009.*

First of all, you should know that many kinds of cancer can be easily diagnosed in a regular checkup. So don't neglect that yearly physical. With early discovery and early treatment, the chances for survival are very good.

You should also be aware of possible signs of cancer: (1) Unusual bleeding or discharge. (2) A lump or thickening in the breast or elsewhere. (3) A sore that does not heal. (4) Change in bowel or bladder habits. (5) Hoarseness or cough. (6) Indigestion or difficulty in swallowing. (7) Change in a mole or wart.

If your symptoms last longer than two weeks, go to your doctor and find out if it means cancer. Don't wait for the symptoms to become painful. Pain is not an early cancer sign.

Food book helpful for children

If you're having trouble teaching your children the importance of eating a balanced diet, maybe you could use some help from a horse, a lamb, a cow and a goose. Fred the Horse Who Likes Bread, Mary Mutton, Molly Moo and Gussie Goose are the animals in "Good Food News for Kids," a publication from the Department of Agriculture, that can teach your children about nutrition. The animals are featured in four booklets which use games and stories to introduce kids to the four basic food groups. The booklets are available free from *Consumer Information, Dept. 41, Pueblo, Co 81009.*

Children will also learn about the role of the farmer in supplying food for the dinner table. For instance, kids may be surprised to learn that the average American eats about 500 pounds of fruit and vegetables each year. That means that a farmer must grow 2,000 pounds of fruits and vegetables every year for each average family of four.

Amtrak 2-year passes are for retired railroaders

Extension of rail travel cards has been made by the National Railroad Passeger Corporation. According to K. A. Housman, vice president of personnel and administration, the following is now in effect:

Beginning with the current calendar year, we extended Rail Travel Privilege Cards expiration dates to two years for retirees and widows as their current passes expire. We also initiated a "reminder to renew" program last summer as a special service for retirees and widows. Approximately two months prior to expiration of RTPCs, they receive letters reminding them that their passes are due to expire and to file application for renewal through their home railroad as soon as possible. A renewal application form is enclosed along with information relative to current train restrictions and advance reservation limitations.

We believe extension of passes to two years will help solve some of the reissuance problems of retirees. Another consideration from our standpoint is the high turnover of the retiree list. By having a two year expiration date on the card, we are able to purge our "Lost Pass List" every so often. The list would otherwise become so voluminous it would no longer be an effective method of maintaining the security of the pass program.

Choking victims can get first aid

A report on "Personal business" by Business Week magazine describes how first aid methods can be used to help persons who are choking on food:

"The easiest way to help someone who is choking on food is to use an anti-choking device, now being found in more restaurants and company dining rooms. This is a tweezer-like plastic forceps that can easily remove an obstruction lodged in someone's throat."

Another method described in the Business Week article is the Heimlich maneuver, named for its developer Dr. Henry Heimlich, director of surgery at the Jewish Hospital in Cincinnati, OH. The method is described as follows:

"There are two ways to administer the technique, which has already saved many lives. First, standing behind the victim, wrap your arms around his waist, allowing his head, arms, and upper torso to hang forward. Grasp your wrist with your left hand and place against the victim's abdomen, slightly above the navel and below the rib cage. Then press your fist forcefully into the victims abdomen with a quick upward thrust. Repeat if necessary. The food should become dislodged quickly.

If the victim is lying down, kneel over him, knees astride hips. Place one hand atop the other and put the heel of the bottom hand on the abdomen slightly above the navel and below the rib cage. Press forcefully into the victim's abdomen with a quick upward thrust. Repeat several times if necessary."

NCSC is supported by AFL-CIO unions

There may be several groups and organizations attempting to win support of retired people, but the National Council of Senior Citizens is a federation of older peoples' clubs and individual members which receive the active support of the AFL-CIO. NCSC has been supported by the Executive Council and endorsed by successive conventions of AFL-CIO since the senior citizens group was launched in 1961 by the late Congressman Aime J. Forand to spearhead the fight for the enactment of Medicare. NCSC has worked consistently alongside organized labor to improve the quality of life for all Americans.

Because some other senior citizens' groups have exploited the elderly, the AFL-CIO has felt it necessary to alert all those senior citizens and elderly people that the National Council of Senior Citizens is one organization that has worked closely with and has earned the support and recognition of AFL-CIO and its affiliated international labor unions.

How to cope with adolesence in the home

To help you ease your teenager's growing pains, the Department of Health, Education and Welfare has written a booklet entitled "An Adolescent in Your Home." The booklet is available for 50¢ from Consumer Information, Dept. 36, Pueblo, CO 81009.

The booklet suggests that the best way to help your teenager is to provide him with all the facts about growing up. Lend a sympathetic ear to his problems and discuss information you give him.

People

NORFOLK & WESTERN: **William W. Faddis,** appointed supervisor signals & communications at Crewe, VA. **Michael H. Stockamp,** leading signalman Gang 922, appointed assistant engineer signals and communications at St. Louis, MO.

CHESSIE SYSTEM: **Donnie R. Devore,** junior circuit engineer-signals, appointed assistant supervisor s&c at Covington, KY. **Joe Bryan Hungate,** signalman at Barboursville, WV, appointed assistant s&c engineer at Huntington, WV. **Estel L. Ratcliff,** assistant supervisor signals at Covington, KY, appointed system s&c inspector at Huntington. **Allen R. Alford,** leading signal maintainer at Fostoria, OH, appointed assistant supervisor s&c at Newark, OH.

LONG ISLAND: **John G. Cunningham,** engineer-c&s, construction, Penn Central, appointed assistant chief engineer-s&c succeeding **D. W. Aiken,** assigned other duties. **Frank H. Banks,** appointed engineer-communications. **Dave K. Horn,** appointed assistant supervisor-signals. **Russell R. Crevoiserate,** appointed supervisor-signal maintenance.

SEABOARD COAST LINE: **John B. Mack,** assistant supervisor, c&s, Monroe, NC, has retired.

LOUISVILLE & NASHVILLE: **John W. Hood,** signal foreman, Birmingham Division, has retired.

PENN CENTRAL: **Harvey Alexander,** system engineer c&s maintenance, appointed chief engineer c&s, succeeding **J. J. Eash,** retired. **J. A. Early,** engineer c&s design, appointed system engineer c&s maintenance. **A. E. Kheny,** appointed assistant engineer-c&s. **E. E. Krueger,** appointed circuit engineer-c&s. **C. E. Lindner,** appointed circuit designer-c&s. **M. T. McNamara,** appointed assistant circuit engineer-c&s.

SAFETRAN SYSTEMS CORP.: **J. B. Heimann** appointed communications sales engineer, headquarters Louisville, KY. **R. L. Larson** appointed communications sales engineer, headquarters Minneapolis, MN. **R. M. Peters,** commuication sales engineer in Chicago, appointed manager, customer service (communications) Cucamonga, CA. **J. I. Matson,** communications sales engineer in Chicago, appointed manager, manufacturing test, Cucamonga. **R. J. Hawkins** appointed applications engineer, Cucamonga.

UNION SWITCH & SIGNAL Division of WABCO: **E. C. Dwyer,** senior marketing consultant, appointed manager-market research and planning.

WESTERN-CULLEN, Division of Federal Sign and Signal Corp.: **Jon P. Schaefer,** product manager, signal and communications, has been appointed general sales manager, s&c, with headquarters in Chicago.

SEABOARD COAST LINE: **Robert B. Waterman,** assistant chief engineer, communications and signals, has retired.

SOUTHERN PACIFIC: **W. J. "Jack" Jones,** engineer maintenance of way and structures systems, appointed chief engineer systems, succeeding **Harry M. Williamson,** retired.

BURLINGTON NORTHERN: **J. H. Hedman** appointed supervisor signals at Superior, WI. **T. J. Hogg** appointed ctc engineer at St. Paul, MN. **B. A. Ricketts** appointed general supervisor signals at Lincoln, NE, and **D. H. Will** appointed manager signal shop at St. Paul, MN.

SERVO CORP. OF AMERICA: **Arthur Holtzman,** appointed district sales manager succeeding **Henry Talbert,** retired.

NORFOLK & WESTERN: **Clyde L. Keehn,** S&C supervisor at Massillion, OH, retired July 1, 1974.

Emmett L. Leonard, S&C engineer at Roanoke, retired November 2, 1974.

DELAWARE & HUDSON: **Kenneth Dodge** appointed assistant engineer signals and communications at Albany, NY.

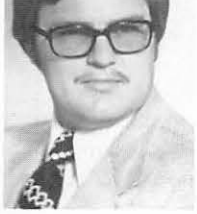
UNION PACIFIC: **V. G. Noland** has been appointed specialist signalman training at Salt Lake City, UT. **V. L. Parker** has been appointed supervisor signalman training with headquarters at Pocatello, ID.

SANTA FE: **R. T. Alder,** appointed signal supervisor, Amarillo, TX. **Paul Dolph,** appointed assistant signal supervisor, Wellington, KS.

READING: **Vance W. Bigelow,** director labor relations, appointed assistant vice president personnel and labor relations. **Spence H. Heltzinger,** appointed director labor relations and **Frank J. Domzalski** and **V. F. Cronan,** appointed assistant managers labor relations.

NORFOLK & WESTERN: **Guy H. Gilmer, Jr.,** director labor relations, appointed assistant vice president labor relations. **John W. Fox,** manager labor relations, appointed director labor relations-maintenance crafts.

R. J. Hawkins
Safetran Sys.



J. B. Heimann
Safetran Sys.

J. I. Matson
Safetran Sys.

R. M. Peters
Safetran Sys.

Arthur Holtzman
Servo Corp.

E. C. Dwyer
US&S-Wabco

General Committee News

What might be called founding fathers of the Burlington Northern General Grievance Committee are shown here at their unification meeting in Denver in 1974. Standing, left to right, **R. F. Richardson,** of the former Great Northern; **W. A. Class, Jr.** from NP; **J. T. Bass,** vice president, BofRS; and **W. W. Lauer,** from the former CB&Q. Seated, left to right, are: **C. J. Chamberlain,** president, BofRS; **B. M. Swift,** former general chairman, SP&S, now retired; and **R. T. Bates,** secretary-treasurer, BofRS.

BN general committee in full operation

Burlington Northern's General Committee now has some eight months of full service behind it and one can almost come to the conclusion that it was always thus. That is, there never were four separate railroads but always one large one with a smooth functioning general committee. The seven BofRS men shown in the picture had a great deal to do with the formation of the general committee, writing the by-laws and providing the leadership to bring about the successful operation.

At the historic 1974 meeting **W. A. Class, Jr.,** general chairman former Northern Pacific was elected general chairman BN General Committee; **R. F. Richardson,** former general chairman Great Northern, was elected assistant general chairman - secretary - treasurer; **W. W. Lauer,** general chairman Chicago, Burlington & Quincy, was elected vice general chairman. In addition to these three officers of the General Committee they were ably assisted by **B. M. Swift,** former general chairman Spokane, Portland & Seattle, now retired; **John T. Bass,** vice president BofRS; **R. T. Bates,** secretary-treasurer BofRS, and **C. J. Chamberlain,** president BofRS.

Others at that important organizational meeting who did much to launch the general committee on its successful venture included the following, as well as those mentioned above. **H. R. Neihart,** general secretary-treasurer, CB&Q; **L. E. Younker,** vice-general chairman, NP; and from Aurora-Galesburg Local 103, local chairmen **D. L. Adkison, R. D. Frank, D. D. Phillips,** and **R. D. Wiley.** Lincoln Local No. 119, former CB&Q was represented by **R. J. Bollinger,** local chairman, **C. H. Hester** and **R. G. Sallee.** Essman Local No. 133 FW&D was represented by **F. W. Barton,** local chairman. GN Lodge No. 154 had the following representatives at the Denver meeting: local chairmen **A. F. Borgrud, A. L. Buckland, H. Heilman** and **H. A. Thomas. G. A. McConn,** recording and financial secretary attended this meeting. St. Paul Local No. 87, former NP, was represented by local chairmen **R. A. Jensen, W. R. Leonard** and **A. L. Vierkant,** as well as **L. V. Tisor,** recording and financial secretary. Vancouver Local No. 188, former SP&S, was represented in addition to B. M. Swift, by **B. A. Gorden** and **J. E. Ross.**

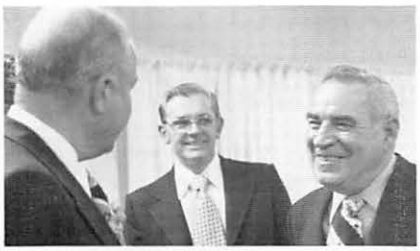
C&NW-CRI&P general committee is operating

The new North Western-Rock Island General Committee officially covering the Chicago & North Western, Chicago, Rock Island & Pacific, Green Bay & Western, and the Joint Texas Division of the CRI&P, is now in full operation. The general chairman is **Henry S. Gerth,** general chairman of the

Milwaukee Road General Committee pauses during one of its work sessions for a picture. Reading left to right are: **M. C. Lennon,** local chairman Lodge 219; **M. D. Collinge,** local chairman Lodge 220; **Leo T. Davies,** general chairman, **J. C. Fortune,** general secretary treasurer; **W. D. Best,** vice president BofRS; and **R. L. McConahay,** vice general chairman and local chairman Lodge No. 61.

C&NW. The two vice general chairmen are **R. E. Hickerson,** vice general chairman of the Rock Island and **Vincent D. Unger,** vice general chairman C&NW. The general secretary treasurer is **A. E. Nenn,** C&NW. Following are the trustees: **J. D. Boots,** local chairman Pioneer Lodge No. 23, Rock Island; **H. DePaepe, Jr.,** local chairman Lodge No. 130, C&NW; **M. W. Kaiser,** local chairman Local Lodge No. 17, RI; **A. T. Olson,** local chairman Omaha Lodge No. 168 C&NW; **G. G. Ruhl,** local chairman Lodge 78, RI; and **V. D. Unger.**

At a recent visit to Barstow, CA, Brother **Richard R. Van Vacter** (right), general chairman on the Santa Fe, visits with **W. S. Autrey,** chief engineer, at new retarder yard.



Brother **R. T. McGill** (right) enjoys conversation with **C. J. Chamberlain,** president BofRS (left) and **W. B. Harwell, Jr.,** grand lodge representative, at McGill's retirement party.

When presidents emeritus meet they always find something interesting to talk about. Shown here at Brother McGill's retirement party are **A. E. Lyon** (left) and **Jesse Clark,** now retired from the presidency of the BofRS.

Railroad union leaders recently signed a master agreement covering rights and protection of employes affected by mass transit projects that receive federal subsidies. Employes of commuter railroads are involved especially where federal grants under the Urban Mass Transportation Act includes rail commuter operations. Shown here signing the agreement are (left to right): **William J. Hickey,** counsel for the rail unions; **W. E. Skutt,** vice-president, Brotherhood of Locomotive Engineers; **C. J. Chamberlain,** chairman, Railway Labor Executives' Association; **Frank Waldner,** grand lodge representative, International Association of Machinists. Standing is Secretary of Labor **John Dunlop.**

Missouri Local No. 72 original charter is presented by Missouri Pacific General Chairman **W. D. Corn** (center) to **A. E. Lyon,** BofRS president emeritus (right) for hanging in his office along with other BofRS memorabilia at Grand Lodge headquarters in Mt. Prospect. **W. D. Best,** BofRS vice-president (left), approves of the transaction.

Brother McGill, assistant general chairman, Penn Central (left) **Donald Murphy,** general secretary-treasurer, Penn Central (center) and **Bernard E. Britcher,** Penn Central general chairman, take time at McGill's retirement party to listen to nearby conversation.

Local Lodge News

Belt Railway Company of Chicago Lodge No. 194 members were recently "caught by the candid camera" at one of their meetings. At the far side of the table, left to right, are: **Thomas Hebding,** local chairman; **Henry J. Ronczkowski,** chief signalman; **Dominic J. Flaska,** recording and financial secretary; **William T. Longhouser; Walter W. Altus,** BofRS vice president; and **Alexander Swiderski.** Seated in front are, left to right, **William J. Chaplick,** and **Garry Timmerman.**

Baltimore & Ohio Chicago Terminal Lodge 143 members were "caught by the camera" at a recent meeting. Shown here, left to right, are: **John McGovern,** financial secretary; **Martin Gager, A. C. Bloomquist, Robert E. Brennan,** general chairman; **J. J. Prinz** and **W. A. DeVoss.** Seated is retired member **Floyd Baker.**

Local 25 holds banquet for retirees

A retirement banquet was held May 17 at the Holiday Inn in Terre Haute, IN to honor four retired signalmen from Louisville & Nashville local 25. Those honored include **William E. Boden** of Shepherdsville, KY with 40 years service; **A. H. Royer** of North Terre Haute with 39 years service; **Walter E. Scholz** of Evansville, IN with 31 years signal service; and **G. C. Meeker** with 33 years service.

After a fine buffet dinner, those in attendance heard timely remarks by **Jesse Clark,** president emeritus, BofRS and **Roy Flowers,** general chairman, L&N. A good representation of members attended this banquet, reports **C. "Mick" McGuire,** chief signalman.

Obituaries

Carl W. Frisk, retired signal maintainer for the Northern Pacific at Little Falls, MN, died March 22, 1975. Brother Frisk retired in 1955 after completing 51 years of service with the railroad. He had been very active in BofRS affairs, having served St. Paul Local No. 87 at chief signalman, recording and financial secretary and as local chairman.

Commodore A. Reed, retired signal maintainer for the Santa Fe at Hutchinson, KS, died recently. Brother Reed had completed 35 years service with the railway when he retired in 1949. He was a member of Rocky Mountain Local No. 161.

Kelly B. Wilkerson, retired signalman for the Southern Pacific at San Jose, CA, died. Brother Wilkerson had completed 34 years service when he retired in 1960. He was a member of Oakland Local No. 92.

Arthur T. Burr, signal maintainer for the Long Island in Babylon, NY, died recently. Brother Burr had completed 29 years service with the railroad when he retired in 1946. He was a member of Aeriel Local No. 56.

Charley Yancey, retired assistant signalman for the Southern at Rock Mart, GA, died. Brother Yancey retired in 1962 after completing 36 years with the railway. He was a member of Miller-Griffith Local No. 49.

E. M. Davidson, retired signal helper on the Wabash at Decatur, IL, died recently. Brother Davidson retired in 1954 after completing 40 years service with the railway. He was a member of Wabash Local No. 55.

T. M. Ruud, retired signal maintainer at Delano, MN, for the Great Northern, died recently. Brother Ruud had completed 46 years service with the railroad when he retired in 1960. He was a member of Great Northern Local No. 154.

Thomas E. Powell, retired signalman at Fremont, NE, died recently. Brother Powell retired in 1948 after completing 32 years ser-

vice with the Union Pacific. He was a member of Rock Springs Local No. 8.

Joseph M. Killeen, retired signal helper for the former New York, New Haven & Hartford, at Hartford, CT, died recently. Brother Killeen had completed 31 years of service with the railroad when he retired in 1957. He was a member of Nutmeg Local No. 7.

Vernon B. Tabb, retired test maintainer c&s at Lewistown, PA, died recently. Brother Tabb had completed 46 years service with the Pennsylvania when he retired in 1958. He had served as leverman of Mountain City Local No. 1.

Elmer A. Maas, retired signal maintainer for the New York Central—Lines West, at North East, PA, died recently. Brother Maas retired in 1971. He was a member of Steadfast Local No. 35.

Lewis A. Zapalac, retired signal helper at Lobo, TX, died recently. Brother Zapalac had completed 18 years service with the Southern Pacific when he retired in 1962. He was a member of Gulf Coast Local No. 99.

Hubert F. McConnell, retired signalman for the former Pennsylvania at Coshocton, OH, died recently. Brother McConnell had served 44 years with the railroad when he retired in 1954. He was a member of Pitt Local No. 112.

Fred L. Blackketter, retired ctc maintainer for the Southern Pacific at Aztec, AZ, died recently. Brother Blackketter had completed 24 years service with the railroad when he retired in 1968. He was a member of Tucson Local No. 126.

Major G. Thomson, retired assistant signal supervisor, Tucson Division, Southern Pacific, died recently. Brother Thomson was a member of El Paso Local No. 182.

Thomas L. Gordon, retired signal supervisor on the Western Division, Southern Pacific, died recently. Brother Gordon was a member of Oakland Local No. 92.

C. P. Kirby, retired signal maintainer at Waskom, TX, died recently. Brother Kirby had completed 44 years service with the Texas & Pacific when he retired in 1959. He had served as chairman for Ft. Worth Local No. 141.

News About Members

Safety Savings Bond Winners at Newton, KS on the Santa Fe included: **M. R. Emery,** signalman (center). Shown with him on this occasion are **F. O. Collins,** signal supervisor (left), and **D. P. Sollitt,** signal maintainer (right). Brothers Emery and Sollitt are members of Mid-West Local No. 33.

Susan Owens, center, discusses her short story book with **Ray Weatherholt,** left, supervisor of the printing department, and **Mrs. Muriel Smith,** right, English teacher of Allegany High School.

Signalman's daughter writes story book

Children in the Allegany County elementary schools in the Cumberland, MD, area, are going to have some delightful animal stories to read. Thanks to the efforts of **Susan Owens,** who in her senior year at Allegany High School, wrote a book titled "Animal Stories." Susan, who is the daughter of **Abner J. Owens,** Baltimore & Ohio signalman, started writing this collection of 12 short stories as a class project. These delightful stories include some of the most well known animals; such as, horses, deer, dogs, rabbits, cats, and even a coyote. The book was published by the printing department under the supervision of Ray Weatherholt. Susan Owen's English teacher helped with the editing, Mrs. Muriel Smith. Although she was enrolled in the food service department Susan Owens enjoys writing and these short stories show it. In fact, school officials feel that the stories are so well done and will be so beneficial to school children that the book will be distributed in all Allegany elementary schools.

K. W. Johnson, signal maintainer at Durant, IA, for the Rock Island, recently retired after having put in 35 years with the signal department. At one time he had also been a signal gang foreman. When he retired on June 1, 1975 his fellow employes gave him a blue Rock Island jacket with a cloth BofRS emblem, as well as a BofRS lapel pin. He is a member of Rock Island Local 183 and his fellow Brothers wish him well on his retirement.

UP scholarship won by signalman's son

George Eizman, son of signal inspector **George Eizman** of Caliente, NV, has been awarded a Union Pacific scholarship to attend the University of Nevada in Las Vegas. Brother Eizman is a member of Eureka Local No. 19 and has served 24 years with the UP.

(Please turn to page 22)

NAM Cont'd

Maintainer's wife honored by state

Mrs. Viola Henne-Hamby, wife of **James B. Hamby,** signal maintainer on the Burlington Northern at Vancouver, WA, was honored as the "Handicapped Woman of the Year" last year by the State of Washington. A special luncheon was held by Governor Daniel J. Evan's Committee on Employment of the Handicapped. Mrs. Hamby has received national recognition for her paintings and her other accomplishments. She received a plaque from the Governor's office. She has been paralyzed in both arms and legs since birth which makes it impossible for her to use her fingers although she has learned to type and paint with implements held in her teeth. Several of her paintings were on display at the luncheon in Olympia. In addition to painting, and doing housework, Mrs. Hamby has found time to act as a co-founder of a worldwide association for persons having this defect, known as arthro gryposis. This association of food and mouth painting sells greeting cards made from these paintings all over the world.

"The purpose of the Handicapped Woman of the Year Award is to bestow a special honor to an active handicapped woman who has encouraged, inspired and promoted the useful employment of other disabled persons regardless of color, creed, age, sex, location, or formal education," states **Daniel J. Evans,** Governor, Washington.

Mrs. Viola Henne-Hamby (center) receives a plaque from **Nat Jackson,** special assistant, Human Resources, Governor's Office, State of Washington. At her right is her husband, **James Hamby,** signal maintainer, Burlington Northern. Others at the head table included (far left) **Father Cyril Kenna,** O.S.B., St. Martins College, Olympia, and (far right) **Harold Krents,** guest speaker, a blind attorney with the Washington, DC firm of Surrey, Karasik & Morris, who represented the President's Committee on Employment of the Handicapped.

Several of **Mrs. Viola Hamby's** paintings were on display at the Annual Awards Luncheon for the Governor's Committee on Employment of the Handicapped.

Signalmen's sons win college scholarships

Robert F. Russell, son of **P. L. Russell,** signal maintainer at Selkirk, NY yard of the Penn Central has won an engineering scholarship to Rensselaer Polytechnic Institute. Brother Russell is a member of Albany Local No. 80.

Brian R. Wells, son of **R. J. Wells,** electronic specialist at Selkirk yard, has won an engineering scholarship at George Washington University. Brother Wells is a member of Local 213.

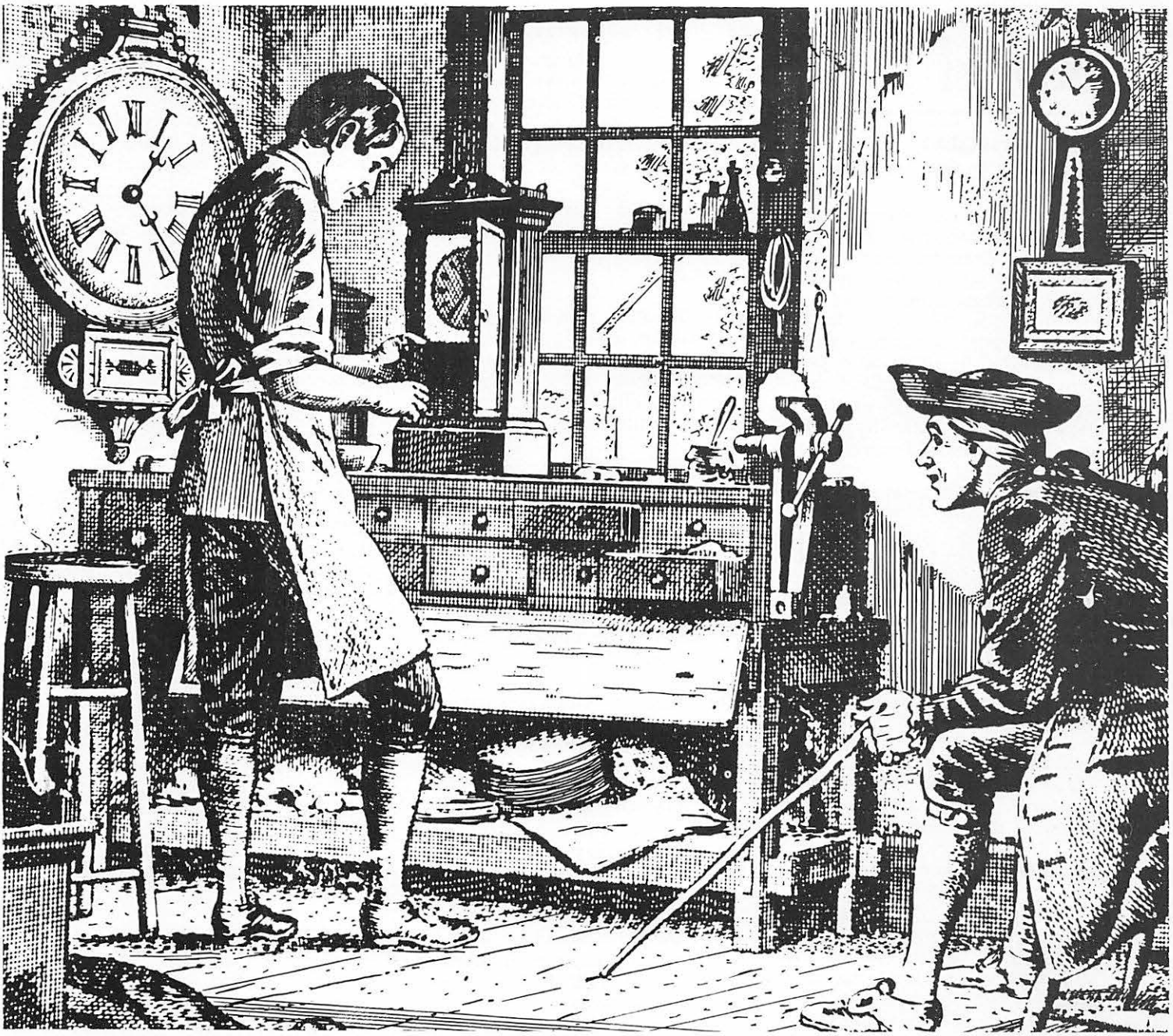
Russell and Wells were awarded the Frank Thompson Scholarships through competitive examinations.

SOO LINE: **Ray A. DesJardins,** signal maintainer, at Marquette, MI has retired after serving 25 years with the railroad. Brother DesJardins is a member of Soo Line Local No. 6.

PENN CENTRAL: **Harold "Red" Johnson,** retired signal maintainer for the former New York Central at Albany, NY received his 50-year BofRS pin recently at a PC regional meeting in Albany. TSJ apologizes for cutting Brother Johnson's record to only 25 years as indicated in the caption on page 21 of the June issue.

SOUTHERN: **Thomas C. Keltner,** signal maintainer and a member of Miller-Griffith Local No. 49, has been appointed supervisor c&s, at Birmingham, AL. **Raymond H. Brown,** signal maintainer at Greensboro, NC, and a member of Walters Local 110, has retired.

(Please turn to page 27)



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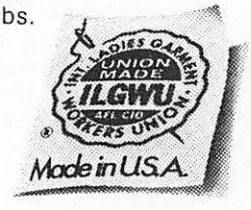
It began before the Revolutionary War. The "mechanicks" of the Colonies visited the merchants to urge them to sell American manufactured goods instead of imports. It helped make jobs for Americans and build a new nation. Today it is equally important to buy American union-made products to protect ourselves from imports from low-wage countries where workers are paid as little as 11c an hour. Such imports destroy the jobs of hundreds of thousands of Americans. When Americans lose their jobs they can't buy what you and other Americans produce.

Make sure to look for and insist on the ILGWU "Made in USA" union label before you buy women's and children's apparel. It is the symbol of the creativity of American design, the skill of American workmanship and the importance of American jobs. It makes a difference – the job you save may be your own!

75th Anniversary ILGWU 1900-1975

Keep Americans Working



Union Label Department, International Ladies' Garment Workers' Union, 22 W. 38th Street, New York, N.Y. 10018

RS&I

RS&I correction in Rule 236.21

In the RS&I department of The Signalman's Journal the Rules, Standards & Instructions for railroad signal systems has been published and these rules are based upon the 1969 revisions. Section 236.21 Location of roadway signals was changed in 1970 and unfortunately this change was not noted when we published the section on page 16 of the September 1974 issue of TSJ. Here is the correct rule:

Section 236.21 Location of roadway signals.
Each roadway signal must be (a) positioned and aligned so that the indication it displays can be clearly associated with the track it governs and (b) located over or to the right of the track it governs in other than single-track territory.

Subpart G—Definitions

Sec. 236.700 Definitions.
For the purposes of these rules, standards, and instructions, the following definitions will apply.

Sec. 236.701 Application, brake; full service.
An application of the brakes resulting from a continuous or a split reduction in brake pipe pressure at a service rate until maximum brake cylinder pressure is developed. As applied to an automatic or electro-pneumatic brake with speed governor control, an application other than emergency which develops the maximum brake cylinder pressure, as determined by the design of the brake equipment for the speed at which the train is operating.

Sec. 236.702 Arm, semaphore.
The part of a semaphore signal displaying an aspect. It consists of a blade fastened to a spectacle.

Sec. 236.703 Aspect.
The appearance of a roadway signal conveying an indication viewed from the direction of an approaching train; the appearance of a cab signal conveying an indication as viewed by an observer in the cab.

Sec. 704 Aspect, phantom signal.
An aspect displayed by a light signal, different from the aspect intended, caused by light from an external source being reflected by the optical system of the signal.

Sec. 236.705 Bar, locking.
A bar in an interlocking machine to which the locking dogs are attached.

Sec. 236.706 Bed, locking.
That part of an interlocking machine that contains or holds the tappets, locking bars, crosslocking, dogs and other apparatus used to interlock the levers.

Sec. 236.707 Blade, semaphore.
The extended part of a semaphore arm which shows the position of the arm.

Sec. 236.708 Block.
A length of track of defined limits, the use of which by trains is governed by block signals, cab signals, or both.

Sec. 236.709 Block, absolute.
A block in which no train is permitted to enter while it is occupied by another train.

Sec. 236.710 Block, latch.
The lower extremity of a latch rod which engages with a square shoulder of the segment or quadrant to hold the lever in position.

Sec. 236.711 Bond, rail joint.
A metallic connection attached to adjoining rails to insure electrical conductivity.

Sec. 236.712 Brake pipe.
A pipe running from the engineman's brake valve through the train, used for the transmission of air under pressure to charge and actuate the automatic brake equipment and charge the reservoirs of the electro-pneumatic brake equipment on each vehicle of the train.

Sec. 236.713 Bridge, movable.
That section of a structure bridging a navigable waterway so designed that it may be displaced to permit passage of traffic on the waterway.

Sec. 236.714 Cab.
The compartment of a locomotive from which the propelling power and power brakes of the train are manually controlled.

Sec. 236.715 Chain safety.
A chain provided for the purpose of preventing the receiver of a continuous inductive automatic trainstop, train control cab signal device from falling should it become detached from its normal support.

Sec. 236.716 Changer, pole.
A device by which the direction of current flow in an electrical circuit may be changed.

Sec. 236.717 Characteristics, operating.
As applied to electrical apparatus, the measure of the electrical values at which the apparatus operates. (Drop-away, pick-up, working value, etc.)

Sec. 236.718 Chart, dog.
A diagrammatic representation of the mechanical locking of an interlocking machine, used as a working plan in making up, assembling and fitting the locking.

Sec. 236.719 Circuit, acknowledgment.
A circuit consisting of wire or other conducting material installed between the track rails at each signal in territory where an automatic trainstop system or cab signal system of the continuous inductive type with 2-indication cab signals is in service, to enforce acknowledgment by the engineman at each signal displaying an aspect requiring a stop.

Sec. 236.720 Circuit, common return.
A term applied where one wire is used for the return of more than one electric circuit.

Sec. 236.721 Circuit, control.
An electrical circuit between a source of electrical energy and a device which it operates.

Sec. 236.722 Circuit, cut-in.
A roadway circuit at the entrance at automatic trainstop, train control or cab signal territory by means of which locomotive equipment of the continuous inductive type is actuated so as to be in operative condition.

Sec. 236.723 Circuit, double wire; line.
An electric circuit not employing a common return wire; a circuit formed by individual wires throughout.

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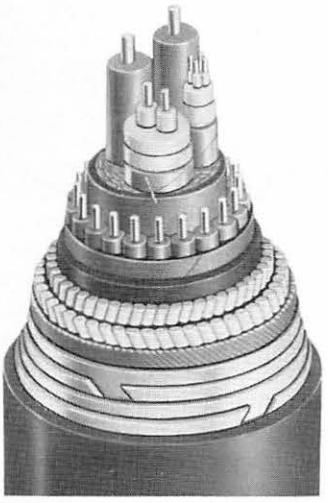
You start right.



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Okonite can engineer the L.I.I. cable that is optimally safe and economical, whatever the combination of services required . . . power, control, signal, and/or communication.

Send us a description of the services you need in an L.I.I. cable, and we'll send you a design tailored to your needs.

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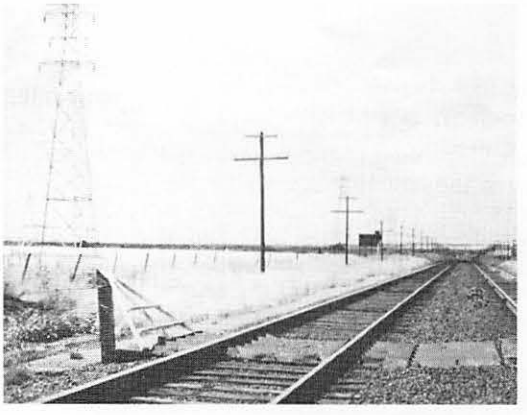

You end right.

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News from Canada

Canadian General Committee members attending the Summerside meeting include (standing rear, left to right): **D. Majury** (165 CN); **John McCormick** (187 CN) grand lodge trustee; **J. E. Rewcastle** (12 CN) assistant vice-general chairman; **B. W. Green** (192 CN); **R. A. Pellow** (189 CP); **H. M. Bustard** (184 CP); **Earl Charlebois** (144 CP); **J. A. Mac Askill** (144 CP); **Yvan Lemieux** (118 CN); **H. A. Stockdale,** retired grand lodge representative; **N. Desilets** (196 CP; **H. Tracz** (202 CN); **R. C. Lewis** (167 CN); **W. W. Schaefer** (165 CN); **J. Goda** (12 CN); **R. A. Oderkirk** 167 CN); **L. P. Morin** (175 Toronto Terminal); **A. N. Cotton,** retired grand lodge representative. Seated center (left to right): **R. E. York** (192 CP) assistant general chairman; **D. A. McManus** (205 CP) assistant general chairman; **D. McAlpine** (47 TH&B) assistant general chairman; **John E. Platt** (12 CP) BofRS vice-president; **R. T. Bates,** BofRS secretary-treasurer; **C. J. Chamberlain,** BofRS president; **R. R. Mitchell** (204 ONR) grand lodge representative; **J. E. Dubois** (144 CP) general chairman; **H. C. Hueston** (204 CN); **R. E. McCaughan** (12 CN). Front row (left to right): **R. W. Fulton** (124 CN); **V. Matity** (203 CN); **W. J. Hilland** (125 CP); **J. N. MacTaggart** (167 CN); **E. A. Cunningham** (118 CN); **G. W. Orton** (122 CP) assistant general chairman; **A. G. Lapointe** (203 CN); **A. N. Wright** (12 CP); and **J. R. Dickson** (204 CN). Local lodge number and railroad are in parenthesis for each man.

Progress reported at Canadian meeting

Considerable progress has been made in the last three years by signalmen in Canada in the areas of wages, fringe benefits and signal training. This was the substance of reports by officers of the Canadian General Committee at their annual meeting July 23-25 in Summerside, Prince Edward Island.

Concerning the 1974 bargaining, **John E. Platt,** BofRS vice-president said "we returned to the bargaining table in 1974 in concert with all 18 Canadian railway unions. That round of negotiations proved to be quite historic with 100,000 members of the Associated Railway Unions being the largest single bargaining unit in Canada. And to the credit of all parties, we were able to conclude the best settlement ever, in record time, with no third party intervention in the form of mediation or conciliation.

"The settlement provided a cost of living adjustment for 1974, plus a cost of living clause for 1975 that provides full protection against inflation. Combined with the arbitration award, the settlement puts our members considerably ahead of the point at which we were at the time of our last general meeting." Also, Platt acted as secretary-treasurer of the Associated Railway Unions Negotiating Committee.

Comparing 1975 with 1972 on some of the negotiated gains for BofRS members, the following are of interest: Hourly wages for maintainer-mechanic rate increased 38.6% to $6.038 in 1975; for monthly rated signalmen (179.3 hours per month), the annual salary comes to $15,318.40, up some over $4,000 from 1972; an afternoon shift differential in 1975 is 15¢ and the

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Discussing Canadian railway labour conditions are (left to right): **Edward G. Abbott,** executive secretary, Canadian Railway Labour Association; **John E. Platt,** vice-president BofRS; **Charles J. Chamberlain,** president BofRS; and **R. C. Smith,** chairman, Associated Railway Unions.

night shift differential is 20¢; group life insurance increased to $7,000; sickness benefits are up to $123 per week; and finally the requirements for longer vacations has been cut.

A new three-year contract has been signed with the Quebec, North Shore & Labrador covering about 90 BofRS members who install and maintain both signal and communications equipment and facilities.

The first-ever negotiated agreement concerning Canadian railway pensions was reached in 1973. It provided a 2% formula for active employes for all service performed after Jan. 1, 1956. In 1974, this was extended back to 1935 for CN employes and to 1937 for CP Rail employes. Also, the Canadian Department of Labour is undertaking a full-scale inquiry into railway pensions.

Other agreements signed have provided for increasing CN leading maintainers rate of pay to 10¢ per hour and this has been incorporated into the basic rate. Call rules for technicians have been improved, and a 40¢ per hour increase for foremen is included. Demands for 1975 have been served on the railways and negotiations are under way.

"The Railway Safety Advisory Committee has approved a set of guidelines on the minimum standards of training for all signal employes in Canada. This in turn has obliged CP Rail to get moving on implementing a program of training. We have negotiated a Training Agreement.

"Since 1972 I have been involved on a continuing basis with the Railway Safety Advisory Committee of the Government, along with the heads of the signal departments of the railways and government, we form Working Group #3 (Signals). This Group is charged with the duty of implementing the recommendations of the Railway Safety Inquiry held in 1971. Up to the present time guidelines on signal training have been approved, and we are presently working on a standard set of rules of maintenance and inspection for all railways. Progress in this area is slow, but I am sure it is an area where we should be able to make some progress into having input into the size of territories of signal maintainers, this is particularly important on CP Rail.

"I have been involved with the Canadian Railway Labour Association in the areas of pensions, transportation policy, etc.," Platt reported.

R. R. Mitchell, general chairman and grand lodge representative reported that he had organized the members of the CP Rail signal shop in Winnipeg, into the BofRS. "These men had never belonged to a union and indicated they were interested, so we organized them into our group."

The executive committee recommended that BofRS conventions be held every 4 years instead of the present 3, and this was approved by the Canadian General Committee. The recommendation said:

"The expense and financial drain to Grand Lodge for preparing and holding Conventions each three years is increasing, and

"The time spent by officers and office help in preparing for Conventions could be utilized to perform organizational work that is now being deferred on Convention years.

"The expense to the Locals and General Committees for sending Delegates to the Convention each three years is increasing so fast that many Locals and General Committees cannot afford the expense and cannot send Delegates to the Convention.

"RESOLVED, That the Constitution be changed to provide that Grand Lodge Conventions and election of Grand Lodge and General Committee Officers be held once every four years."

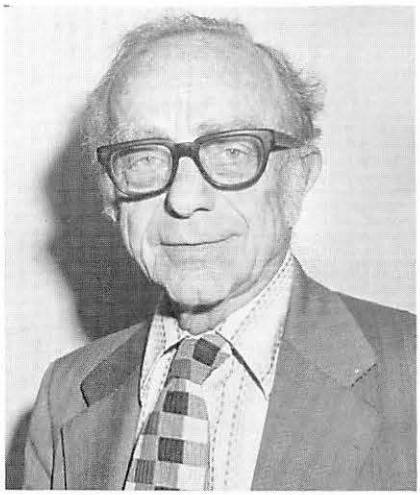
NAM Cont'd

CHESSIE SYSTEM: **J. E. Ketterer,** assistant signal maintainer, and **C. L. Wilburn,** lead signal maintainer at Ashland, KY, have retired. Brothers Ketterer and Wilburn are members of Russell Local No. 139. **Lane Clements,** assistant signal supervisor at Richmond, VA, and a member of Richmond Local No. 148, has retired. **G. L. Howard,** signal maintainer at Augusta, KY, and a member of Gateway Local No. 135, has retired. **E. G. Cronise,** signal maintainer at Lowmoor, VA, and a member of Clifton Forge Local No. 89, has retired. **G. C. Morrison,** signal maintainer at Newark, DE; **G. W. Wolfe,** lead signal maintainer at Jefferson, MD; **J. R. Miller,** signal maintainer at Glencoe, PA; and **V. L. Stigile,** signal maintainer at Chester, PA, have retired. These Brothers are members of Monumental City Local No. 31.

NORFOLK & WESTERN: **James M. Curry,** signal maintainer at Lake City, PA, and a member of Austin Local 113, has retired. **Burdette E. Farthing,** signal maintainer at Leipsic, OH, and a member of Nickel Plate Local No. 166, has retired. **John R. Cale, Jr.,** signal maintainer at Jewett, OH, and a member of Wheeling Local No. 197, has retired.

CP RAIL: **Robert Ferguson,** signalman at London, ON, and a member of Burman Lodge No. 165, has retired. **H. H. Tracy,** signal maintainer at McAdam, NB, has retired.

have been unemployed for 15 or more weeks is the next order of employment priorities under this bill. Underemployed persons are the next order of priority. Within 30 days after enactment of this act, the Secretary of Labor would establish procedure, rules, and regulations necessary to insure that sufficient numbers of these unemployed persons are referred to eligible applicants.



Labor editor wins Eugene V. Debs award

Ruben Levin, editor and manager of LABOR Newspaper for over 22 years has been chosen as the 1975 recipient of the Eugene V. Debs Award in the field of labor. The award is made annually in the name of Eugene V. Debs, union leader and one-time secretary-treasurer and editor of the Brotherhood of Locomotive Firemen. Levin will receive the award at the annual Debs Award dinner on November 8 in Terre Haute, IN. A long-time newspaper man and graduate of the University of Wisconsin in 1925, Levin started on the Capital Times in Madison and later served on Milwaukee newspapers and 11 other papers around the country as well as on the European edition of the New York Herald Tribune.

Levin was a founder and the first president of the Milwaukee Newspaper Guild. In the mid-1940s he helped found and served as chairman of Labor Press Associated, a cooperative national news and feature service for union publications.

Previous honors bestowed upon Levin were distinguished editorial achievement by the Sidney Hillman Foundation in 1956 for a series of articles in LABOR on the "emasculation of federal regulatory agencies" and in 1965 a citation from the University of Wisconsin School of Journalism for meritorious service in the newspaper field.

RLEA supports new bills with some changes

"The Railway Labor Executives' Association would enthusiastically support the enactment of legislation based upon H.R. 6351 and H.R. 7681, if Section 10 of H.R. 7681 were deleted; if the ICC and the Secretary of Transportation were required to join in agreement on the interim and final standards for determining the "cost of operating the line" and the "revenue attributable to the line"; if at least 70%-30% subsidy provisions such as those found in the Regional Rail Reorganization Act were incorporated in the abandonment provisions of the legislation; if a status quo contracting out provision were included; and, if the provisions of Section 701(a) and (b) of H.R. 6351 were adopted," testified C. J. Chamberlain, chairman, Railway Labor Executives' Association, and president, Brotherhood of Railroad Signalmen.

H.R. 6351 is Railroad Improvement Act of 1975 and H.R. 7681 is Railroad Revitalization Act.

"The latest Administration transportation bill, H.R. 7681, would make abandonment of rail lines very easy of accomplishment simply by changing the criteria necessary to secure abandonment authority from the ICC. H.R. 7681, however, is far more ambitious than its unsuccessful predecessors in attempting to concentrate power in the hands of the Secretary of Transportation. Section 10 of H.R. 7681 would confront this nation with a virtual executive fiat in the control of the destiny of the individual railroads and their employees, the economic vitality of individual communities, and the structure of the nation's rail network. Section 10 would authorize the Secretary of Transportation to condition the granting of $2 billion in loan guarantees upon a complete restructuring of the nation's rail network in whatever way the Secretary might decide was appropriate at any given moment—and while procedures are written into Section 10 for a limited ICC participation and court appeal, they are so strictured as to be wholly ineffectual.

"The membership of the RLEA is unanimously and most vigorously opposed to the enactment of Section 10 of H.R. 7681.

"H.R. 6351 would also amend paragraph (18) of Section 1 of the Interstate Commerce Act in such manner as to prohibit the Interstate Commerce Commission from basing abandonments of lines of railroad upon arbitrary criteria which may have little or no relationship to the financial viability of the line involved.

"The amendment proposed by H.R. 6351 would require the Commission to give 'primary weight to the needs of those served by the line . . . and the financial effect of . . . [its] continued operation . . . upon the . . . railroad. . . .' It would require the Commission to consider the needs of shippers and the financial effect upon carriers of line abandonments rather than use arbitrary and irrelevant carload figures in making that determination. Such an amendment as that contained at Section 701(a) of H.R. 6351 could be readily incorporated into the Interstate Commerce Act along with the amendments to Section 1 proposed by H.R. 7681. The RLEA supports enactment of Section 701(a) of H.R. 6351.

"The members of the RLEA wholeheartedly endorse those provisions of H.R. 7681 and H.R. 6351 which provide for loan guarantees to carriers for the purpose of acquiring, building and rebuilding rolling stock.

"H.R. 6351 also would require the Commission to impose fair and equitable arrangements for the protection of the interests of employees no less than those established by Congress in Section 405(b) of the Rail Passenger Service Act of 1970 which provides protection for employees affected by the discontinuance or abandonment of rail passenger service and Section 5(2) (f) of the Interstate Commerce Act which provides protection for employees affected by abandonments or other changes in operations effected by mergers and other consolidations of railroads. Those provisions of H.R. 7681 which provide employee protection should be amended by the substitution therefor of the contents of Section 701(b) of H.R. 6351," Chamberlain said.

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75,000	30,000	7,500	52.50	71.25
100,000	40,000	10,000	70.00	95.00
150,000	60,000	15,000	105.00	142.50
250,000	100,000	25,000	175.00	237.50

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Signalman's Worksheet

A-C track circuits and relays

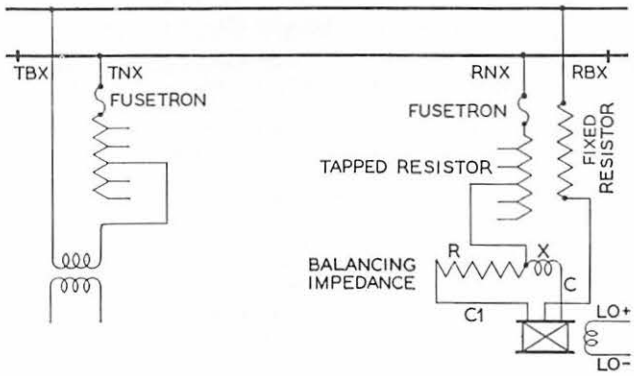


Fig. 125—Single-rail track circuit for dc propulsion.

Single-rail track circuit for D-C. propulsion

This track circuit, Figure 125, requires a balancing impedance to keep d.c. from interfering with the operation of the a-c. relay.

The voltage drop of the d-c. propulsion return causes a d-c. voltage across the relay track connections. The magnitude of this d-c. voltage depends on the weight of rail, the resistance per 1000 feet of the bonded power rail, and the amount of current flow in the power rail.

The reactance of X in the balancing impedance is quite high—24 ohms at 5 volts 60 cycles, and 10.6 ohms at 5 volts 25 cycles. X has the same ohmic resistance as resistance R.

Due to the high impedance of reactance X, practically all the a.c. for operation of the relay flows through 0.67-ohm resistance R, through half section, C1, of the track element winding, and back to track, thus operating the track relay.

Taking the Model 2A 2-element track relay as an example the impedance of each half (C and C1) of the winding is approximately 1.25 ohms at 60 cycles; and the ohmic resistance is about 0.36 ohm. When there is any flow of d.c. from the track to the track element of the relay, due to the equal ohmic resistance of R and of X and the equal resistance of C and C1 of the track element's winding, the d.c. divides equally in each section of the track winding, flowing in opposite directions in the two sections. Hence, the opposed ampere turns neutralize each other, and no magnetic flux results in the magnetic circuit of the track relay.

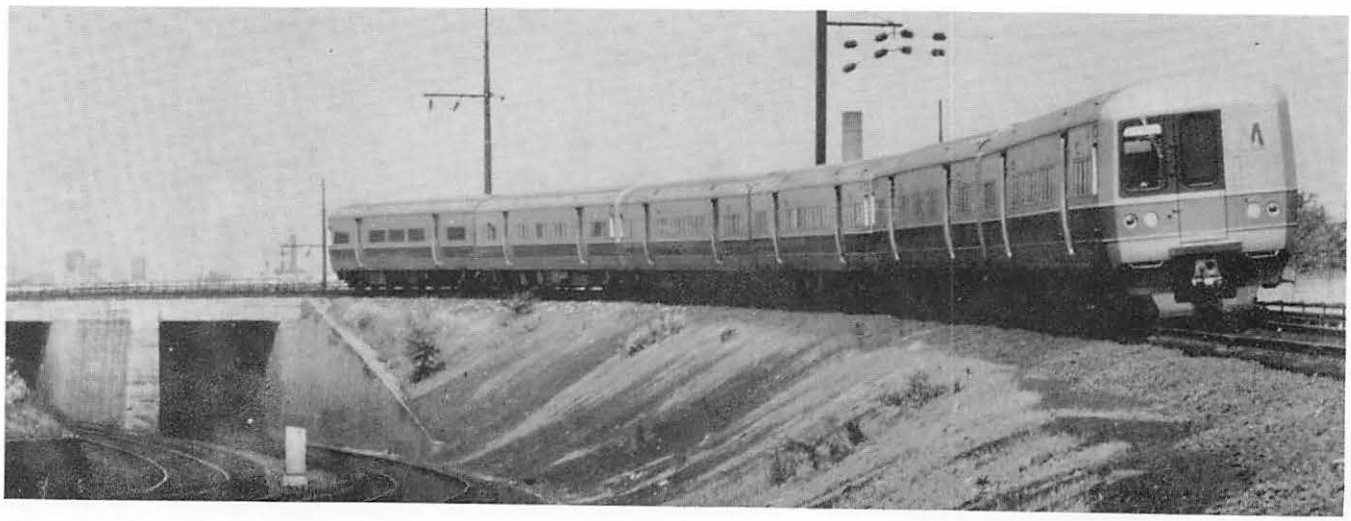
The balancing impedance has certain limitations. One is the heating effect of the d.c. on elements R and X of the impedance and on windings C and C1 of the relay. They will stand 5 amperes d.c. continuously and intermittent short period spurts of 10 amperes d.c.

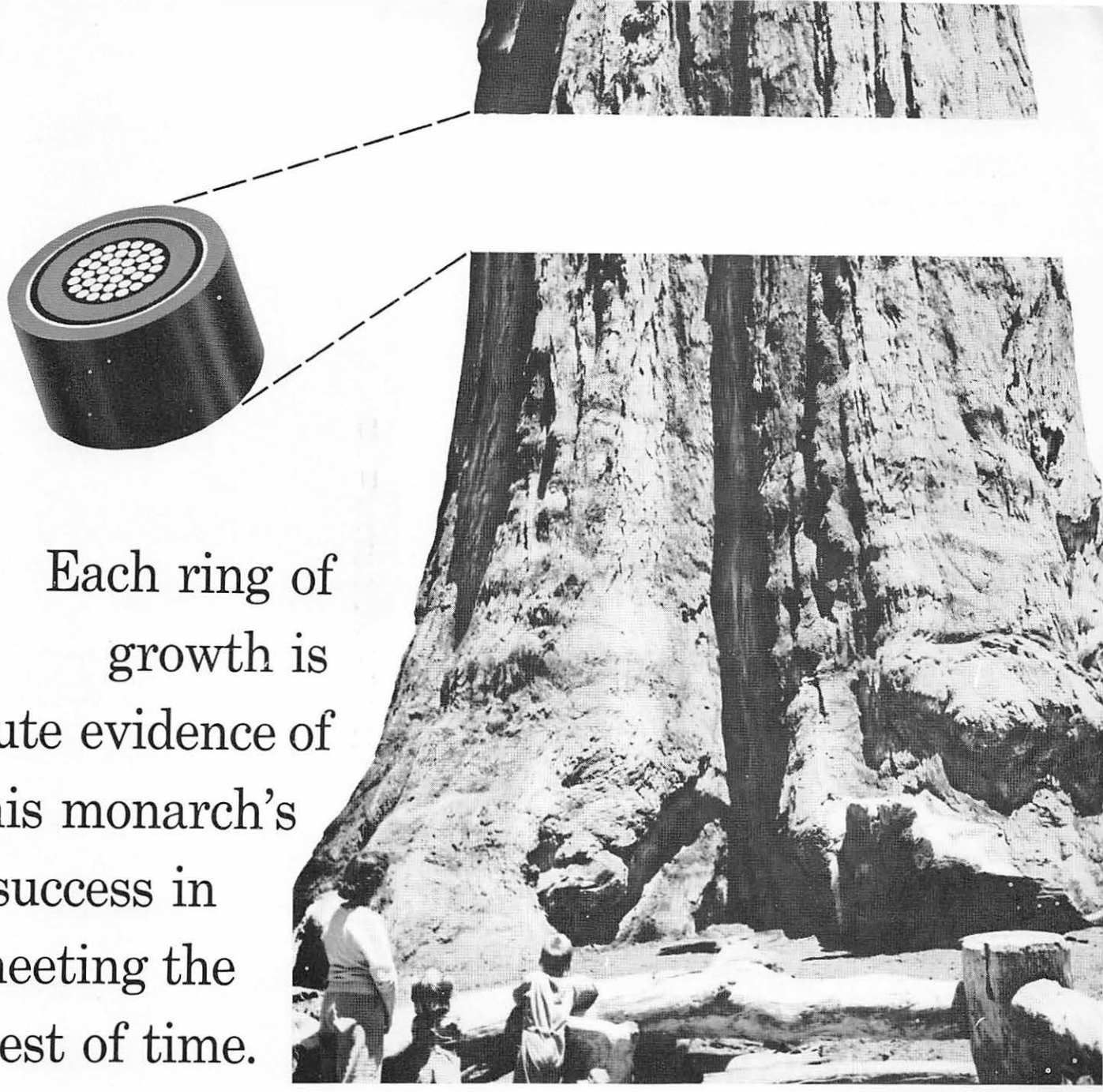
A second limitation is the saturation effect on the laminated steel magnetic circuit of the reactor by the d.c. flowing through its coil. Flux induced in the magnetic circuit by the d.c. reduces the permeability of the magnetic circuit, with corresponding reduction in the impedance of the reactance section of the balancing impedance. This permits some increase in the a-c. flow through the reactance section and its corresponding section (C) of the track element winding which opposes the a.c. in the C1 section of the track winding, thereby weakening the operation of the track relay.

Tests have shown that 5 amperes d.c. from the track to the balancing impedance and track relay will require an increase of about 8% in the a.c. from the track to maintain the same strength of operation as when no d.c. is present.

Single-rail track circuits are usually used at interlockwhere there are several tracks so that the power rails of the tracks can be bonded together to provide as much conductivity as possible for return of the propulsion current. They are also used extensively on subway and elevated lines.

Information and drawings furnished by General Railway Signal Co.





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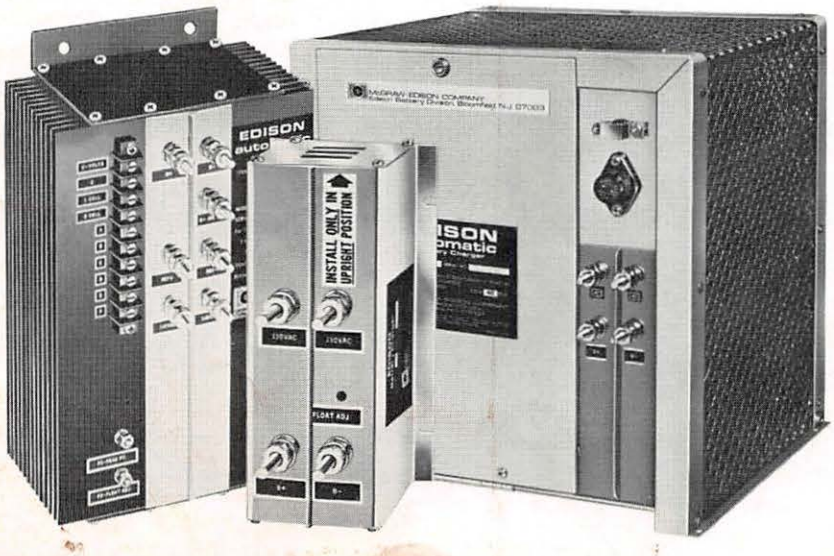

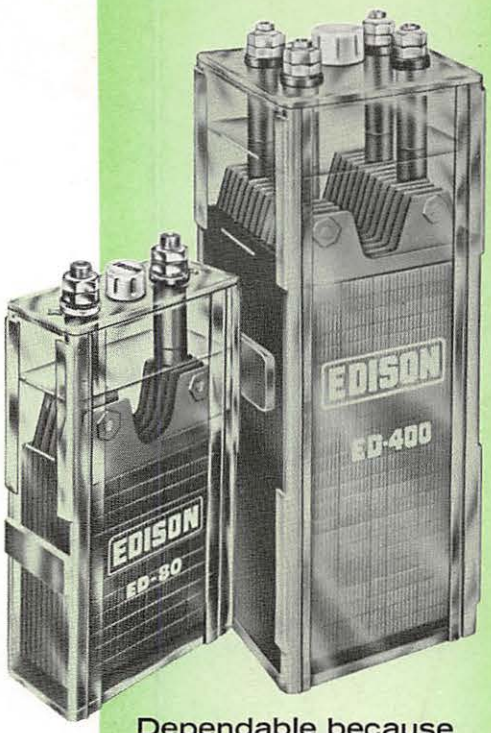

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